**MONITORING, VERIFICATION AND EVALUATION UNIT**
**AGRICULTURAL POLICY REFORM PROGRAM**

**MVE UNIT**
**APRP**

*Sponsored by:*
**Government of Egypt,**
**Ministry of Agriculture and Land Reclamation**

**United States Agency for International Development/Egypt**
**Office of Economic Growth, Competitiveness and Agricultural Development Division**

# RICE SUBSECTOR BASELINE UPDATE, II


**John S. Holtzman**
Abt Associates

**Abdel-Rahim Ismail**
EQI

with

**Samar Maziad**
**Sherif Fayyad**
EQI




**Abt Associates Inc.**

*Prime Contractor:*
**Abt Associates Inc.**

*Subcontractors:*
**Environmental Quality International,**
**Management Systems International**

USAID Contract No. 263-0219-C-00-7003-00



Project Office: 15th Floor, 7 Nadi El Seid Street, Dokki, Cairo
Telephones: (202) 337-0357, 337-0592, 337-0482
Fax: (202) 336-2009



February, 2002

Impact Assessment
Report No. 18

**TABLE OF CONTENTS**

**ANNEXES**

## LIST OF TABLES

## LIST OF FIGURES

## LIST OF ACRONYMS

| | |
|---|---|
| ACC | Agricultural Commodity Council(s) |
| APRP | Agricultural Policy Reform Program |
| ARC | Agricultural Research Center |
| CAAE | Central Administration for Agricultural Economics of MALR/EAS |
| CAPMAS | Central Agency for Public Mobilization and Statistics |
| C&F | Cost and freight |
| CIC | Cereals Industry Chamber (of the Egyptian Federation of Industries) |
| CIF | Cost, insurance and freight |
| COMESA | Common Market for Eastern and Southern Africa |
| EE | Eastern Europe |
| EEPC | Egyptian Export Promotion Center (of MFT) |
| EFI | Egyptian Federation of Industry |
| EIHS | Egypt Integrated Household Survey |
| EPIQ | Environmental Protection Indefinite Quantity Contract |
| ERS | Economic Research Service (of USDA) |
| ESA | Employee stakeholder association(s), a form of privatization |
| EU | European Union |
| FAO | Food and Agriculture Organization (of the United Nations) |
| FAS | Foreign Agricultural Service (of USDA) |
| fd. | Feddan (equivalent to 0.420 hectares or 1.037 acres) |
| FIHC | Food Industries Holding Company |
| FOB | Free on board |
| FSRU | Food Security Research Unit of APRP |
| GASC | General Administration for Supply Commodities (within MSIT) |
| GATT | General Agreement on Tariffs and Trade |
| GDP | Gross Domestic Product |
| GOEIC | General Organization for Export and Import Control |
| GOE | Government of Egypt |
| HC | Holding Company |
| HC-RFM | Holding Company for Rice and Flour Mills |
| HE | His Excellency |
| IFPRI | International Food Policy Research Institute |
| kg. | Kilogram |
| LE | Egyptian Pound |
| MALR | Ministry of Agriculture and Land Reclamation |
| MEIC | Ministry of Economy and International Cooperation |
| MELES | The Middle East Library for Economic Services |
| MFT | Ministry of Foreign Trade (formerly MEFT) |
| MPE | Ministry of Public Enterprise |
| MPWWR | Ministry of Public Works and Water Resources (former name) |
| MSHT | Ministry of Supply and Home Trade |
| mt | Metric Ton |

| | |
|---|---|
| mmt | Million Metric Tons |
| MVE | Monitoring, Verification, and Evaluation Unit of APRP |
| MWRI | Ministry of Water Resources and Irrigation |
| NIS | Newly Independent States (of the former Soviet Union) |
| NPC | Net Protection Coefficient |
| PBDAC | Principal Bank for Development and Agricultural Credit |
| RDI | Reform Design and Implementation Unit of APRP |
| RRI | Rice Research Institute (of Egypt's Agricultural Research Center) |
| RTTC | Rice Technology and Training Center (in Alexandria) |
| SGS | Société Générale de Surveillance |
| S&O | Situation and Outlook (reports and reporting) |
| UR-GATT | Uruguay Round, General Agreement for Tariffs and Trade |
| USAID | United States Agency for International Development |
| USDA | United States Department of Agriculture |
| WTO | World Trade Organization |

## ACKNOWLEDGMENTS

The principal investigator and author of this study is John Holtzman. He was ably assisted by Dr. Abdel-Rahim Ismail of Zagazig University, who has worked on the rice subsector with the MVE Unit since 1997. Samar Maziad and Sherif Fayyad provided research assistance. Mohammed Atwa interviewed rice traders and millers in Fayoum and Assiut and contributed Annex 1 to the report. Sayed Haggag of MHST provided wholesale and retail rice price data. Dr. Adel Mostafa assisted in conducting some interviews with rice industry participants in Alexandria. Yvonne Azer was responsible for text editing and final formatting of the report. Dr. Gary Ender, MVE Chief of Party, provided several excellent reviews of report drafts.

MVE also wishes to acknowledge the ongoing support and encouragement of Dr. Hussein Soliman, APRP Program Director, and Dr. Mohamed Omran of USAID's Competitiveness and Agricultural Development Division.

The MVE Unit benefitted from and continues to benefit from collaboration with the following organizations and groups:

- the MALR, particularly the Rice Research Institute and the Economic Affairs Sector
- the Rice Branch of the Cereals Industry Chamber (Alexandria)
- the Rice Subcommittee of the Agricultural Commodity Council
- the Rice Technology and Training Center (Alexandria)
- MFT/GOEIC (which assembles and tabulates export statistics)
- the Food Industries Holding Company
- ESA rice milling companies
- private commercial rice millers and exporters
- private paddy wholesale traders
- CAPMAS (rice trade statistics)
- APRP/RDI Unit, which has been working to develop a website for Egyptian rice price data.

Individuals from these groups generously offered their time, provided detailed information, and answered numerous questions. Without the combined input of all of the aforementioned key informants, this study would not have been possible. The MVE Unit alone is responsible for any errors and omissions. The findings and conclusions of this study are those of the MVE Unit alone and not of APRP as a whole or USAID.

## RICE SUBSECTOR UPDATE 2: EXECUTIVE SUMMARY

**Purpose and Context of the Report.** This report is the second and final *Rice Subsector Update* of the MVE Impact Assessment Program. It will be followed by a *Rice Subsector Endline* at the conclusion of APRP.

As a major and profitable field crop, rice employs many farmers, traders and mill workers, and generates a lot of revenue for farmers, traders, millers and exporters. As an important export crop, it generates significant foreign exchange–an estimated $134.3 million in 1998, $87.6 million in 1999, $103.1 million in 2000, and $131.2 million in 2001 (first eleven months).

The MVE Impact Assessment Program subsector baseline and endline studies have and will use a structure, conduct, performance (S,C,P) approach to describing and analyzing the organization, behavior or operation, and economic performance of key input (fertilizer) and commodity (rice, cotton, wheat) subsectors in the Egyptian agricultural sector. The interim subsector update reports on rice and cotton have implicitly used S,C,P as an organizing construct but have not done any formal assessment of how changes in the organization of those subsectors influence how subsector participants behave and how the subsector performs with reference to a number of key performance attributes: allocative efficiency, operational efficiency, technical efficiency, progressiveness, employment, entry/participation, market coordination, and market responsiveness/competitiveness. Rather, the purpose of the interim subsector updates has been to document important policy and regulatory changes from market year to market year, and to examine how these have been implemented. No rigorous assessment of performance was ever intended or attempted.

Therefore, this report summarizes key policy and regulatory measures affecting the rice subsector and documents how the subsector responded to these measures, as well as to various exogenous events: macroeconomic (exchange rate) depreciation, international rice market conditions and prices, and variability in rice harvests. As such, the report is rather more descriptive than a dense and analytical assessment of how performance has been explicitly (or implicitly) affected. As a group, the subsector update reports (including the annual MVE or MVE/CSPP study of cotton marketing and liberalization measures) provide a valuable resurce for those wishing to follow and understand year-to-year changes in the rice and cotton markets and policy frameworks. The endline studies will focus more on cross-year comparisons and apply more formally the S,C,P framework, with its implicit emphasis on (final) performance assessment.

**Paddy Crop, Summer 2000.** The summer paddy crop was the largest on record. The MALR reported the crop as 6.0 mmt on 1.569 million feddans, with record average yields of 3.82 mt/feddan. The MWRI reported paddy area at 2.02 million feddans, an estimate that most industry observers and analysts consider far more accurate than the MALR figure.

**Paddy Prices in 2000/01.** As paddy producers and traders realized how large the summer 2000 crop would be, they began to dump carryover stocks from the 1999 crop on the market. This depressed producer prices and into-rice mill wholesale prices in July and August 2000. As the huge 2000 crop was harvested and began to be sold in late August-September, producer paddy prices declined further.

Quotes as low as LE 350/mt were not unusual in rice producing zones. This contrasted sharply with 1999/2000 prices, which began at LE 600 or above and remained at those levels for most of that previous marketing season.

**Exports.** Milled rice exports had exceeded the modern era record 1997/98 level of 409,118 mt, reaching 755,434 mt. by the end of September 2001. During the early months of the marketing season, MALR officials made export projections of up to one million mt, which were reported in the press. The rice industry anticipated exports of 300,000 to 350,000 mt as of mid-January 2001, but implementation of a subsidy on 23 January 2001 accelerated exports and made Egypt competitive in non-traditional markets, such as various COMESA countries in Africa.

Syria became Egypt's biggest market in 2000/01, importing 159,559 mt from both private and public sources. Libya imported record levels of rice in entirely government-to-government deals, totaling 73,052 mt. Turkey remained a key client, although currency devaluation and chronic financial difficulties made Turkish rice imports lower than they could have been; they reached almost 113,000 mt. Imports of other countries on the African continent, including Sudan and Northern African countries, reached 141,193 mt, well beyond earlier (1990s) levels.

**Domestic Rice Market.** Rice was plentiful and cheap in the domestic market, which probably led to higher rice consumption levels in both urban and rural areas. There were also reports (unsubstantiated) that rice has been fed to livestock in some zones. Giza 178, the rice variety with the second greatest area and output (following Sakha 101), is reserved largely for the domestic market, although some was shipped to Sub-Saharan Africa markets. It is considered inferior in shape (long and thin) and color (dark), and it has a higher proportion of chalky grains than varieties such as the Sakha series, Giza 177, and Giza 173, which meet export market standards.

**Policy Intervention to Raise Producer Prices.** In January 2001, HE Minister Youssuf Wally announced that producers would be paid LE 500/mt for paddy brought to public sector rice milling companies, after the GOE received stinging criticism, in the People's Assembly, of laissez-faire crop pricing policies, that led to very low producer paddy prices. Industry participants noted that this effort to help producers was too little, too late. They noted that three-fourths or more of the paddy is sold shortly after the harvest, when producers need cash to reimburse agricultural production loans, pay workers, and cover school fees. Hence, they observed that paddy traders held most of the paddy crop and would stand to benefit from any "producer" subsidy.

**Export Subsidies.** The GOE intervened in the rice export markets by offering exporters subsidies of LE 100/mt for most varieties and LE 200/mt for Giza 178, claiming that such subsidies were needed to counter stiff foreign competition, dumping (China), and subsidies (U.S.). Foreign importers learned of this quickly and adjusted their offer prices downward accordingly.

At the same time, exports boomed after 23 January 2001, when the subsidies were announced, reaching over 536,000 mt by the end of July 2001, a modern era record, before ending at 755,434 mt in September. Although there are no statistics to confirm this[1], exporters report that much of the

[1] MFT/GOEIC export statistics are disaggregated by country, but not by country and variety.

expansion in exports was represented by shipments of milled Giza 178 to price-sensitive Sub-Saharan African markets, particularly those in COMESA countries that had waived duties on Egyptian imports. The nearly $50/mt subsidy on Giza 178 exports made Egyptian rice competitive in these markets that typically import exclusively cheap, low-grade long grain rice from Asia. Note also that COMESA countries, including Egypt, do not charge import duties on products exported from member countries.

As discussed below, the subsidy issue is a politically sensitive one. Under WTO rules, direct export subsidies are not permissible. Some informants did not acknowledge the subsidy at all, preferring to refer to it as support to growers. This was clearly off the mark, as no subsidies were paid before late January 2001, at which point 80% or so of farmers' paddy had been sold, nearly all at unusually low prices of LE 350-400/mt. Beneficiaries of rice export subsidies were wholesale paddy traders, who had reportedly bought up and were storing much of the commercialized paddy crop, and foreign importers and consumers. Millers and exporters were able to operate at a high level, making most of their money on volume of throughput and export in 2000/01, as per ton profit margins were low.

The MVE Unit was unable to obtain any information at all about the subsidy program from official sources or about the overall magnitude of rice subsidies in 2000/01. We estimate the subsidy on all exports since late January 2001 to be LE 55.0 million. Evidently, there was never any formal decree–only instructions from the Minister of Economy and Foreign Trade, after decisions about the subsidies were taken at the Cabinet level with the full concurrence of the Ministers of Trade, Agriculture, and Finance and the Central Bank Governor.

**Policy Advocacy.** Both the Rice Branch of the Cereals Industry Chamber (EFI) and the Rice Subcommittee of the ACC were instrumental in lobbying the GOE to offer export subsidies. Although most exporters and large commercial millers privately note that paddy prices of LE 500 are "fair" to growers and acceptable to exporters in most years, 2000/01 was an exception. The world has been awash in rice in 2000/01, depressing world prices to low levels and making it difficult for Egypt to compete, even in its main traditional markets of the Eastern Mediterranean. Exporters had no interest in advocating a paddy support price above lower market-clearing levels (LE 350-400/mt), because they were having trouble competing before the subsidy program was implemented. In fact, HE Minister Youssuf Wally's announcement of a paddy support price of LE 500/mt, made 10 days before the decision to implement export subsidies, led exporters to complain that higher into-mill procurement prices would further hamper their competitiveness. In that sense, one policy change (raising "producer" prices) engendered another, providing the rice industry with an excellent justification for advocating export subsidies. There is no evidence that the GOE announcement of a paddy support price was designed to pave the way for export subsidies. This ended up being an unintended consequence of the producer price policy change.

**ESA Rice Mills.** The ESA rice mills obtained finance (through intervention of the FIHC) in 2000/01 to buy paddy, though actual paddy purchases were well below those in 1999/2000, a year of large-volume purchases (of 453,000 mt) at too high prices. Note that as of 30 June 2000, approximately half of the paddy bought in 1999/2000 remained in ESA milling company stores.

Although there are reports of profitable operations of 2-3 ESA mills, the financial data presented are incomplete and not fully convincing for these more successful mills. It is possible that other enterprises

at these mills, such as macaroni/pasta production and animal feed mixing, are profitable and offset losses on rice milling operations. Furthermore, the other 5-6 ESA mills are not operating profitably. Without government to government deals, such as sale of 61,000 mt of milled rice to Libya, these ESA mills would be in deep trouble. They cannot compete with private sector commercial mills without subsidies, and FIHC guarantees that they will repay bank loans.

**Outlook for 2001/02.** With early estimates of cotton area planted of at least 750,000 feddans, some producers who grew paddy in 2000 clearly shifted to cotton in 2001. Nevertheless, with a shift of only 230,000 to 250,000 feddans, paddy area could remain quite large in 2001, though below the 2000 record levels. Preliminary indications are that the area cultivated to paddy falls in the 1.1-1.3 million feddan range. Maize is the other major summer crop, covering a forecast 1.6-1.7 million feddans per year, whose area could also increase at the expense of paddy, though a large part of the maize crop is cultivated outside the seven major rice-producing governorates.
With lower planted area, paddy production will decline (3.85 to 4.81 mmt on 1.1-1.3 mill. feddans), paddy wholesale prices should remain in the LE 500-550/mt range that prevailed over much of the summer of 2001, and exports will not reach 2000/01 levels, but could fall anywhere in the 150,000 to 350,000 mt range. The big unknown, as usual, is carryover of summer 2000 crop paddy (and some milled rice) into the 2001/02 marketing season. Informal estimates range from 250,000 to over one million mt of paddy.

Egypt's export competitiveness will depend in large part upon the supply and prices of competing rice in Eastern Mediterranean markets: U.S. Southeast medium-grain rice, Calrose, Italian round rices and Australian and Chinese medium-grain rice. It will also depend upon the available supply of Egyptian rice for export, domestic price levels, and subsidies in Egypt and competing countries.

**Outlook for the Medium to Long Run.** Area cultivated to rice will likely remain in the 1.1-1.5 million feddan range during the first decade of the 21st century. The exceptionally large area planted to paddy in summer 2000, the huge crop, and the record high exports in 2000/01 of 755,000 mt will be outliers, showing that 2000/01 was an unusual year. It is unlikely, as well, that sizeable rice export subsidies, totaling an estimated LE 79.1 million in 2000/01, will be paid in future years, though policy-makers face an interesting dilemma. Having expanded rice exports significantly to new markets, particularly in Sub-Saharan Africa, do they try to defend Egypt's newly won market share through continued subsidies? Or do they regard the 2000/01 experience in subsidizing exports as a one-off effort to rid Egypt of large surpluses, allowing Egyptian exports to return to a more sustainable 250,000 to 350,000 mt/year range? The dilemma is obviously not just a rice issue; returns to alternative summer crops will greatly affect area planted to paddy, which will in turn affect surpluses for export and domestic paddy/rice price levels in future years. Rice production levels, prices and returns have and will have an important impact on area planted to cotton and returns to cotton, and vice versa.

Hopefully, net returns to alternative crops, such as cotton, maize, horticultural and tree crops, sugar beets, and oilseed crops, will be sufficiently attractive to keep paddy area from ballooning to 2.0 million feddans, as it did in summer 2000. Improved access to high-income country markets for higher value products, particularly horticultural products and various processed foods, will help Egypt, if such access can be negotiated bilaterally (particularly with the EU) and multilaterally through the next round of trade talks.

Over the long run (beyond 2010), it is hard to envisage rice as a major export crop in Egypt. Egypt will probably maintain market shares in traditional Eastern Mediterranean markets, such as Syria, Jordan, Lebanon, Libya and Turkey, though its shares in highly price-sensitive markets such as those in Eastern Europe and Sub-Saharan Africa are likely to fluctuate and trend downward.

Paddy yields are projected to rise steadily at 2% per annum, as next generation, high-yielding, short-season varieties are brought on stream (first and second generation varieties covered 82.7% of paddy area cultivated in summer 2000). The yield increases will in part offset area decreases. As domestic population increases, domestic consumption in the aggregate will also increase, though per capita consumption will likely remain in the 40-45 kg/person range. With aggregate domestic demand expanding steadily (though relatively slowly), exports will likely decline, perhaps to the 150,000 to 250,000 mt/year range by the end of the decade (i.e., by 2010).

MALR rice researchers are experimenting with jasmine, grown on modest areas in 1999 and 2000 (466 feddans), and *baldo*, an Italian variety that commands a premium in Turkey and other regional markets. The Rice Research Institute is also planning to introduce the short-season varieties Sakha 103/104 soon, following up on its success with Sakhas 101/102. This research is promising and it could, over the long-term, lead to a change in the MALR's production (varietal choice) strategy and a change in the composition and value of exports, with increased exports of higher-value rice types. In the short- to medium-run, however, it is unlikely that such types will comprise a large proportion of Egypt's rice exports. The short-season varieties already widely grown, Giza 178 and Sakhas 101/102, will continue to be produced largely for the domestic market.

The fundamental question of pricing of water, a major input into paddy production, is unlikely to be addressed anytime soon, though alternative demands on limited water supplies will become greater, serving to highlight the opportunity cost of growing high water-consuming crops such as rice and sugarcane. Water use in industry, for human consumption, for new satellite cities and settlements away from the Nile, and in the new lands will inexorably rise, leading to water supply constraints on agricultural production. The one-time perception of water abundance, buttressed by high water levels on Lake Nasser behind the Aswan Dam in recent years, will eventually turn to a more realistic perception of water scarcity. While Egypt will not face by 2010 the same binding water constraints and water insecurity that most of its Middle Eastern neighbors have faced for some time, policy-makers will need to address problems of water scarcity and optimal water use. Whether optimal water use can be achieved solely through supply side controls and better irrigation system management is moot. Water user associations, promoted by the MWRI, can help to manage supply. Market signals on both the input and output sides may ultimately be required, which will affect high water-consuming crops such as rice.

**Industry Views on Policy and Regulatory Priorities.** The nascent Rice Union has still not yet been legally constituted, although the ACC and its Rice Subcommittee and the Rice Branch of the Cereals Industry Chamber are providing the industry with a formal mechanism for voicing their questions, concerns, and priorities. The Rice Subcommittee lobbied effectively for implementation of rice export subsidies. Exporters and millers were pleased with the program, which operated efficiently, leading to quick disbursements of subsidy payments in 2000/01 (unlike the 1996/97 subsidy program).

Exporters are also pleased with exchange rate adjustment, particularly the 5 August 2001 devaluation of the LE to 4.15 to the U.S. dollar. With commercial bank rates sliding to 4.20-4.23 LE to the dollar within a week of this announcement, further depreciation was inevitable. In fact, the Egyptian pound was devalued again on 12 December 2001 to 4.50 to the dollar (with an allowable 3 percent band). The devaluations (and future exchange rate adjustments) will bolster exports and allow paddy buyers to pay rice growers higher prices in 2001/02 without undermining exports.

**Outstanding Policy Agenda and Recommendations**

With the Rice Subcommittee of ACC seeing eye-to-eye with the GOE on most issues in the second half of the 2000/01 marketing season, other policy issues have faded into the background. We raise them below to remind readers that rice subsector liberalization is not fully complete and that several policy and regulatory issues have not yet been adequately addressed.

***Lower the Rice Tariff.*** Protection of nearly 30% percent makes rice imports prohibitively expensive in most years. This contributes to high consumer prices in some years, particularly in the second half of the marketing year (April-August). This has an especially adverse impact on lower-income households, for whom rice is an important staple. While most observers estimated paddy carryover from 2000/01 into 2001/02 to be at adequate levels, and the spring/early summer rice crisis of 1999 now seems to be a distant memory, the rice tariff issue could re-emerge during future years of short production. Paddy prices during the 2001/02 marketing year started at levels of about LE 400-500/mt in September 2001 but shot up to LE 590-630/mt by November 2001.

This strong rise in paddy prices led large commercial millers and exporters to advocate export subsidies and to call for GOE permission to import paddy, without duties, and process it for re-export. Rather than a one-time policy exception, the GOE is advised to remove the tariff on all types of imported rice permanently or lower it to a minimal level (e.g., 5%). This would lead to belated accomplishment of APRP policy benchmarks designed to lower the tariff on imported rice (benchmarks A4 in tranche II and A4 in tranche III).

***Generate Reliable Forecasts and Estimates of Paddy Area Planted and Production.*** The divergence between the MALR-announced estimate of paddy area for 2000/01 and MWRI's and the industry's higher estimate, suggest that published statistics are unreliable. Note, however, that the MVE Unit, led by Dr. Morsy Fawzi, worked closely with the MALR/EAS during the summer cropping season of 2001 to strengthen area estimates, so some progress has been made on this score. Private traders, millers, exporters and prospective importers need reliable information on supplies (at a minimum, production, but also stocks) to run their businesses effectively. Knowledge of paddy and rice stocks is especially deficient.

***Consult the Industry More Closely on Rice Varieties.*** While the short-season varieties Giza 177 and Sakha 101 have emerged as acceptable substitutes to long-preferred (longer-season variety) Giza 171, the industry would like more input into key breeding decisions. Giza 178 is considered to be an inferior variety, particularly in discriminating export markets, such as Turkey and Syria, where importers in those countries have protested that some Egyptian exporters shipped pure 178 or reportedly mixed 178 with desired varieties, citing consumer reports of uneven cooking times and different consumption

properties. Sakha 102 has reportedly high broken rates in milling, and paddy yields are lower than for Sakha 101 by six percent (though 6% higher than for Giza 177).

***Strengthen Rice Situation and Outlook Reporting, Including Reporting of Accurate Price Information.*** There remains a dearth of useful information for the industry, though APRP is working with the EEPC to develop a rice (and cotton) web site. Large commercial millers and exporters report that they still have far better and more accurate information about the international market than they do about the domestic market. They continue to question official MALR statistics on paddy area, yields and output, and they correctly state that there is no reliable source whatsoever of information on paddy and rice stocks, particularly carryover from one marketing year to the next.

# 1. INTRODUCTION

The purpose of this paper is severalfold. First, it will complete the analysis of the 1999/2000 rice marketing season begun in the *Rice Subsector Baseline Update* (January 2000), using a more complete set of price and trade data, and benefitting from structured informal interviews with key informants done in the fall of 2000 (early in the 2000/01 marketing season).

Second, the paper provides description and analysis of developments during almost the entire 2000/01 production/marketing season. Third, the paper offers some preliminary information about the 2001/02 season. The MALR announced for area planted to paddy this year is 1.37 million feddans, well below the record levels of the 2000 summer crop. As domestic paddy prices firmed during the summer of 2001, industry participants anticipated that farmers would receive higher paddy prices after the harvest, and that this would lead to higher export prices for Egyptian rice and reduced exports in 2001/02. Domestic paddy prices did rise strongly, particularly in October through December 2001, and exports will likely be lower than in 2000/01, in part due to smaller marketed surplus and the fact that there will be no export subsidy this season.

Note that this report is meant to be a selective update of developments in the rice subsector. MVE recommends that periodic (quarterly or semi-annual) reports on domestic subsector and industry performance, as well as international market updates, will become a routine output of the MALR. This would benefit MALR, the Ministry of Supply and Home Trade, APRP, and various private sector clients. Note that the APRP/RDI Unit built a web site of basic rice subsector data in 2001, which can be found at http://www.agpolicy.com/new/rice/. This web site will be transferred to the MFT in 2002 and will have a different site address and appearance, though the content should remain substantially the same. The Rice Subcommittee of the ACC is also meeting periodically and preparing internal reports on Egypt's rice marketing situation and export trends.

The organization of the subsector update report is as follows. Chapter 2 presents data on the record 2000 paddy crop and points out divergences in MALR and MWRI figures. It also examines area cultivated to short-season, high-yielding varieties during the late 1990s and in summer 2000. Chapter 3 takes an in-depth look at the operation and performance of the rice market in Egypt during the 2000/01 season, comparing it to the very different 1999/2000 season. A major part of this chapter is devoted to examining into-mill wholesale paddy price and milled retail rice price increases, by presenting available empirical evidence. Chapter 4 assesses Egypt's rice export performance in 2000/01, comparing it to the 1999/2000 marketing season. It analyzes this performance in light of world market trends and domestic market developments. Chapter 5 examines Egypt's changing competitive position in each major market during 1999/2000 and 2000/01, as well as future opportunities and threats to Egypt's market share. Chapter 6 describes progress and post-privatization problems in the operations and Holding Company management of the now eight ESA rice milling companies. Chapter 7 summarizes private rice industry views on GOE policies and regulations affecting the rice subsector.

Several annexes provide supplementary information on rice production, milling and consumption in Upper Egypt, updated production and trade statistics, and selected press clippings of important GOE announcements. Annex 3 updates analysis done in the first *Rice Subsector Update* of changing shares of cropped area to rice and competing summer crops, as well as rice's profitability relative to other summer crops.

## 2. PADDY CULTIVATION AND OUTPUT IN 2000

Overall area planted to paddy increased again by 28 percent in 2000 to an estimated 2.0 million feddans from 1.559 million feddans (official figure) reported for 1999. Enforcement of GOE restrictions on paddy cultivation seems to have been lax once again in 2000, as area targets were greatly exceeded. While unofficial estimates of area cultivated to paddy of 2.0 million feddans in 1999 appeared to have been exaggerated, this figure is entirely plausible for 2000.[2] It is likely that the 2000 paddy crop exceeded the large 1999 crop of 5.825 mmt by at least 10%. Using MALR's average yield estimate of 3.83 mt/feddan for summer 2000 and MWRI's area estimate of 2.02 million feddans, the estimated paddy crop size would be 7.74 million metric tons. Note that MALR reported a much lower area estimate (1.57 million feddans) than MWRI, and a crop size of 6.0 mmt.

### 2.1 Distribution of Paddy Area by Governorate and Variety

#### 2.1.1 Paddy Area and Production by Governorate in 2000

The estimated paddy area and yields for 2000 are shown by variety for the seven major rice-producing governorates in Table 2-1. Nearly half (47%) of the area cultivated to rice is found in only two governorates: Dakhalia (453,893 feddans) and Kafr El Sheikh (284,434 feddans). Dakhalia alone accounted for 28.9 percent of the estimated paddy area in 2000.

Note that MALR estimates of area planted to paddy in 2000 were slightly higher (0.6%) than for 1999. The biggest area increases took place in Sharkia (15.1%), Beheira (16.3%) and Gharbia (8.7%). According to MALR, significant declines were registered in Kafr El Sheikh (-8.6%), Fayoum (-19.7%) and governorates other than the seven main rice-producing governorates (-37.4%). Despite a mild decrease in area planted to paddy in Dakhalia (-1.6%), this governorate remained the largest producer of paddy, comprising 28.9% of total paddy area

---

[2] See Annex 3 for a discussion of shifts among the major three summer crops—rice, cotton and maize—during the past ten years. Focusing on the seven major rice-producing governorates (six in the Delta plus Fayoum), MALR reported paddy area for 1999, as shown in Table 2-1 was 1,476,985 feddans. By cross-checking paddy area cultivated with total summer cropped area and area allocated to competing crops over the past several years, it is possible that paddy area was under-estimated by MALR and was actually 10 percent higher than their estimate. If this were the case, paddy area in the seven major rice-producing governorates would be 1,624,684 feddans. Adding the 82,110 feddans grown (illegally) in "Other" governorates (see Table 2-1) yields nearly 1.71 million feddans of paddy area cultivated nationally in 1999. If MALR under-estimated area cultivated to paddy in Other governorates, national paddy area could have been even higher. Assuming that MALR estimated this Other area as only 50 percent of what was actually sown, national paddy area might have reached 1.788 million feddans. After performing these internal consistency checks, we think that it is unlikely that paddy area exceeded 1.8 million feddans in 1999. For this to have occurred, MALR would have had to seriously underestimate paddy area in both the major producing governorates and in areas outside those zones where rice cultivation is not allowed, and area cultivated to other crops would have had to drop precipitously.

**Table 2-1: Final Estimates for the 2000 Summer Paddy Crop**

| Governorate | Target Area (fd.) | Area Planted (fd.) | % Area Planted over Target | % Change over 1999 | % Total Area | Est. Yield (mt/fd.) | % Change over 1999 | Production (mt) |
|---|---|---|---|---|---|---|---|---|
| Dakahlia | 275,092 | 453,893 | 65.0% | -1.6% | 28.9% | 3.89 | 1.5% | 1,767,459 |
| Kafr El-Sheikh | 303,778 | 283,434 | -6.7% | -8.6% | 18.1% | 3.88 | 8.9% | 1,099,440 |
| Sharkia | 170,202 | 280,576 | 64.8% | 15.1% | 17.9% | 3.83 | 1.4% | 1,073,203 |
| Beheira | 168,125 | 246,584 | 46.7% | 16.3% | 15.7% | 3.95 | 1.2% | 974,007 |
| Gharbia | 48,767 | 166,334 | 241.1% | 8.7% | 10.6% | 3.83 | 2.1% | 636,228 |
| Damietta | 53,988 | 58,489 | 8.3% | -4.6% | 3.7% | 3.25 | -7.0% | 190,265 |
| Fayoum | 17,000 | 28,263 | 66.3% | -19.7% | 1.8% | 3.40 | 5.9% | 96,094 |
| Sub-Total | 1,036,952 | 1,517,573 | 46.3% | 2.7% | 96.7% | 3.85 | 2.5% | 5,836,696 |
| Other | 15,120 | 51,363 | 239.7% | -37.4% | 3.3% | 3.19 | -6.6% | 163,800 |
| Total | 1,052,072 | 1,568,936 | 49.1% | 0.6% | 100.0% | 3.83 | 2.4% | 6,001,180 |

Source: MALR/CAAE

and 29.5% of total paddy production. Kafr El Sheikh, Sharkia and Beheira were the other three largest paddy-producing governorates, cultivating 810,594 feddans of paddy (51.7% of MALR's estimated total) and producing 3.147 mmt (52.4%).

Note from Table 2-1 that the actual area cultivated to paddy exceeded the GOE's target area for all governorates except for Kafr El Sheikh. In two of the largest rice-growing governorates, Dakhalia and Sharkia, area planted exceeded the targets by 65.0% and 64.8% respectively. In Gharbia, area cultivated was greater than the target area by 241.1%.

While overall area cultivated to paddy rose only 0.6% from 1999 to 2000, according to MALR, estimated national production increased by 3.0% to a record 6.0 mmt, the largest Egyptian rice crop on record. National average yields were reported by MALR as a record 3.83 mt/feddan, equivalent to 9.1 mt/hectare (the highest reported yields in the world). This is a laudable achievement, though there is skepticism in some quarters that yields have increased as steadily as reported by MALR over the past decade.

### 2.1.2 Paddy Area and Production by Variety in 2000

The MALR has aggressively expanded area cultivated to short-season rice varieties during the past few years in an effort to conserve water for development of new irrigated lands in Northern Sinai and Toshka.[3] As shown in Table 2-2 and the accompanying pie charts (Figure 2-1), the area planted to short-season varieties increased from only 5.0 percent in 1995 to 52.6 percent in 1998 to 81.1% in 2000. Preliminary figures for 2001 show that the area planted to short-season varieties increased to 91.0% in 2001. The short-season varieties are also noted for blast resistance and high yields. While the older, long-season varieties, Gizas 171 and 172, are plagued by the blast and now grown on greatly reduced areas.

**Long-Season Varieties.** Table 2-2 also shows that area planted to the four long-season varieties, Giza 171, 172, 173 and 176, dropped significantly to 271,500 feddans in 2000, only 17.3% of total area cultivated to paddy, from 1,076,600 feddans in1997, representing 69.5% of total area. The variety whose area was cut back most sharply was Giza 171, the preferred variety of the export trade. Area cultivated to Giza 171 fell from 751,000 feddans in 1997 to 171,600 feddans in 2000.[4]

---

[3] These new irrigated lands will comprise about 240,000 feddans in North Sinai and 300,000 feddans in Toshka.

[4] Note that Giza 171 was canceled after the 1998 summer crop season, meaning that no GOE agency or private trader has been permitted to multiply it and sell certified seed to rice growers during the past three seasons. Nevertheless, Giza 171 remains popular among some producers, particularly in Sharkia, Dakhalia, and Gharbia, who retain their own seed for planting the following season. However, Giza 171 will probably drop out entirely of the paddy crop within 2-3 years, as it has faced major problems with rice blast and there has been rapid determination in grain quality recently.

## Table 2-2 : Area Planted and Production by Rice Variety, 1997-2000

(area in '000 feddans; paddy production in '000 mt)

| Type | 2000 | | | | 1999 | | | | 1998 | | | | 1997 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Area** | **%** | **Prod.** | **%** | **Area** | **%** | **Prod.** | **%** | **Area** | **%** | **Prod.** | **%** | **Area** | **%** | **Prod.** | **%** |
| **Long Season Varieties** | **271.5** | **17.3** | **922.0** | **15.4** | **435.7** | **27.9** | **1,509.0** | **25.9** | **580.9** | **47.4** | **2,052.2** | **46.1** | **1,076.6** | **69.5** | **3,721.8** | **67.9** |
| Giza 171 | 171.6 | 10.9 | 595.7 | 9.9 | 311.8 | 20.0 | 1,096.5 | 18.9 | 465.6 | 38.0 | 1,665.2 | 37.4 | 751.0 | 48.5 | 2,629.5 | 48.0 |
| Giza 172 | 4.2 | 0.3 | 13.8 | 0.2 | 9.9 | 0.6 | 31.9 | 0.5 | 13.7 | 1.1 | 43.5 | 1.0 | 98.8 | 6.4 | 325.9 | 5.9 |
| Giza 173 (Reho) | 29.9 | 1.9 | 98.7 | 1.6 | 48.4 | 3.1 | 167.9 | 2.9 | 39.8 | 3.2 | 137.5 | 3.1 | 55.6 | 3.6 | 190.7 | 3.5 |
| Giza 176 | 65.8 | 4.2 | 213.8 | 3.6 | 65.6 | 4.2 | 212.7 | 3.7 | 61.8 | 5.0 | 206.0 | 4.6 | 171.3 | 11.1 | 575.7 | 10.5 |
| **Short Season Varieties** | **1,271.9** | **81.1** | **4,986.2** | **83.1** | **1,091.7** | **70.0** | **4,207.0** | **72.3** | **643.7** | **52.6** | **2,396.5** | **53.8** | **466.7** | **30.1** | **1,735.8** | **31.7** |
| Giza 175 | 0.0 | | 0.0 | | 0.0 | | 0.0 | | 2.3 | 0.2 | 7.0 | 0.2 | 1.0 | 0.1 | 3.2 | 0.1 |
| Giza 177 | 280.9 | 17.9 | 1,027.2 | 17.1 | 293.6 | 18.8 | 1,052.9 | 18.1 | 280.4 | 22.9 | 1,002.0 | 22.5 | 168.3 | 10.9 | 597.4 | 10.9 |
| Giza 178 | 386.3 | 24.6 | 1,522.9 | 25.4 | 352.2 | 22.6 | 1,395.4 | 24.0 | 283.0 | 23.1 | 1,081.0 | 24.3 | 295.6 | 19.1 | 1,127.5 | 20.6 |
| Giza 181 | 1.3 | 0.1 | 0.5 | 0.0 | 0.2 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.1 | 7.6 | 0.1 |
| Sakha 101 | 387.1 | 24.7 | 1,583.9 | 26.4 | 222.9 | 14.3 | 902.6 | 15.5 | 42.7 | 3.5 | 174.5 | 3.9 | | 0.0 | | |
| Sakha 102 | 216.3 | 13.8 | 851.7 | 14.2 | 222.8 | 14.3 | 855.3 | 14.7 | 35.3 | 2.9 | 132.0 | 3.0 | | 0.0 | | |
| Others | 25.5 | 1.6 | 92.3 | 1.5 | 31.7 | 2.0 | 100.2 | 1.7 | 0.1 | 0.0 | 1.0 | 0.0 | 5.9 | 0.4 | 19.5 | 0.4 |
| Filipino (IR28) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 1.0 | 0.0 | 0.7 | 0.0 | 2.9 | 0.1 |
| **Total** | 1,568.9 | 100.0 | 6,000.5 | 100.0 | 1,559.1 | 100.0 | 5,816.2 | 100.0 | 1,224.9 | 152.6 | 4,450.7 | 153.8 | 1,549.9 | 130.1 | 5,480.0 | 131.7 |

*Sources :* 1) MALR, *Agricultural Economics* (annual statistical report), 1995 to 1999. Starting in 1997, the MALR issued two reports, one for winter crops and the other for summer and *Nili* crops.

2) MALR/CAAE data were cross-checked with MALR/ARC, *National Campaign for Rice*, 1996 to 2000, but some discrepancies were found.

*Notes :* Sakha 101/102 was introduced in 1997. Area and production for this variety are included in "Others" for 1997 only. For 1998 estimates appear separately for each new variety.

Giza 172 was grown on 98,800 feddans in 1997 but had essentially disappeared by 2000, planted on only 4,200 feddans. Giza 173, the popular *reho*, was cultivated on 29,900 feddans in 2000, down from 55,600 feddans in 1997, but showing no signs of disappearing. Giza 173 is grown almost entirely in Damietta and Dakhalia (90.6%). Giza 176, cultivated principally in Fayoum and Kafr El Sheikh, was sown on 65,800 feddans in 2000, virtually the same as in 1999 (65,600 feddans) and 1998 (61,800 feddans).

Area cultivated to the exportable long-season varieties, Gizas 171, 172 and 173, in 2000 continued to drop, from 449,600 feddans in 1998 (38.1% of total rice area), to 371,200 feddans (23.8%) in 1999, to 205,800 feddans in 2000 (13.1%). The fact that the longer-season varieties are still cultivated is somewhat of an embarrassment to the MALR, which canceled Giza 171 over two years ago. Farmers continue to grow the longer-season varieties for two reasons, although they risk rice blast damage to their paddy. First, buyers pay farmers higher prices for the longer-season varieties, which are preferred in consumption over the newer short-season varieties (especially in export markets). Second, milling yields for Gizas 171, 172 and 173 are higher than for the new varieties, with lower percentages of brokens. This is one reason[5] why paddy traders and millers pay higher prices for the longer-season varieties–the net outputs of the milling process (in kg. of milled rice per mt of paddy) are higher than for the newer short-season varieties.

Keeping water consumption in rice cultivation at manageable levels is a key consideration underlying the promotion of short-season varieties, as both human and industrial consumption of Nile river water will only increase in the years to come, not to mention added demands coming from the new lands. MALR breeders also point out that the old varieties are prone to rice blast, while the new varieties have been bred for blast resistance. Despite these important considerations, MALR breeders would be well advised to pay relatively more attention to the consumption and milling characteristics of new rice varieties, factors which are critical to how the market values (prices) different varieties and how traders, millers, exporters, and consumers think about them. These demand factors influence strongly the level of producer returns to paddy cultivation. If the MALR's bottom line is to help farmers, these key factors cannot and should not be ignored.

**Short-Season Varieties.** Area planted to Sakhas 101 and 102, introduced in 1997 on only 5,900 feddans (noted under "Others" in Table 2-2), rose sharply to 78,000 feddans in 1998, nearly 420,000 feddans in 1999, and 603,400 feddans in 2000, comprising 38.5% of total paddy area in 2000. This remarkably rapid expansion is a centerpiece of the MALR's efforts to introduce these new high yielding varieties as quickly as possible. Sakha 103/104 are still only planted on modest trial areas.

Taken together, Giza 177 and Giza 178 continue to be the leading varieties, grown on 17.9 and 24.6 percent of the area cultivated to paddy in 2001. This is relatively unchanged from 1999. The proportion of paddy area planted to these two varieties was 46.0% in 1998, 41.4% in 1999, and 42.5% in 2000. Note, however, that the leading variety sown in 2000 was Sakha 101, which eclipsed

[5] The other reason is that Gizas 171, 172 and 173 have superior color, shape, texture, and cooking characteristics, leading to what consumers perceive as superior short-grain rice.

Giza 178, which had been planted on the largest area, among short-season varieties, from 1997 to 1999.[6]

**Comparative Yields.** Yields were higher on average for all short-season varieties than for all long-season varieties in 2000, averaging 3.92 vs. 3.40 mt/feddan.[7] Over the past four summer cropping seasons, short-season varieties averaged 3.80 mt/fd. while long-season varieties averaged 3.46 mt/fd., a 9.9% differential. Note, however, that the yield gap widened over the four years, from 7.6% in 1997 to 15.4% in 2000. The yield differential in 2000 was 17.9% between Sakha 101 and Giza 171. Clearly, short-season varieties produce higher paddy yields.[8]

Giza 171 yields averaged 3.52 mt/fd, over the past four years (1997-2000), the highest in the long-season variety group. Giza 177, a short-season variety with similar characteristics to Giza 171, averaged yields of 3.59 mt/feddan, only marginally higher (2.1%). Giza 178 yields averaged 3.88 mt/fd., while Sakha 101 and 102 yields were 4.08 mt/fd. and 3.84 mt/fd. respectively on average over the past three years. Sakha 101 has consistently scored the highest yields, 15.9% higher than the average Giza 171 yields since 1998.

### 2.1.3 Paddy Area and Production by Variety and Governorate in 2000

Table 2-3 shows the breakdown of paddy area cultivated by both variety and governorate. Among the long-season varieties, Giza 171 area and production were concentrated in Sharkia (36.8%), Dakhalia (24.1%) and Gharbia (19.4%) in 2000, as in 1999. Giza 172 area was almost exclusively in Beheira (92.5%) in 2000, whereas it was primarily divided, nearly evenly, among Beheira and Kafr El Sheikh in 1999. Giza 173 area was highest in Damietta (48.5%) and Dakhalia (42.1%) in 2000, similar to 1998 and 1999.

Among the short season varieties, Giza 177 is grown principally in Kafr El Sheikh (34.0%), Dakhalia (24.2%), and Sharkia (15.1%). The leading governorate for Giza 178 is Dakhalia (57.4%), with Kafr El Sheikh (23.3%) a distant second. Sakha 101 area is nearly equal in three leading rice-producing governorates: Beheira (26.6%), Sharkia (26.0%) and Dakhalia (22.6%). Sakha 102 area is highest in Beheira (33.0%) and Sharkia (21.5%).

---

[6] Note, however, that the leading variety during the 1990s up through 1998 was Giza 171, which was planted on 465,600 feddans (38.0% of the total) in 1998.

[7] The calculation of average yields for long- and short-season varieties weights the contribution to yields of the different varieties in each category properly, as average yield equals total production (for each category) divided by total area.

[8] When comparing white rice yields (after milling), the yield advantage of the short-season varieties shrinks somewhat. Rice milling yields are higher for long-season varieties. The proportion of by-products is higher for the short-season varieties; these by-products have an economic value, but it is lower than the economic value of milled white rice.

Examining paddy area by governorate, Kafr El Sheikh cultivates mainly Gizas 177 and 178. Dakhlia's paddy area is devoted mainly to Giza 178 and Sakha 101. Beheira cultivates primarily

**Table 2-3: Rice Area, by Variety and Major Producing Governorate, Summer 2000**

('000 feddan)

| Governorate | Long-Season Varieties | | | | | Short-Season Varieties | | | | | | Long Gr. | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G 171 | G 172 | G 173 | G 176 | Total | G 177 | G 178 | Sakha 101 | Sakha 102 | Other | Total | G 181 | |
| **Kafr El Sheikh** | 0.13 | 0.3 | 0.7 | 25.4 | 26.5 | 95.5 | 90.1 | 33.5 | 36.9 | 0.2 | 256.2 | | **282.7** |
| **Dakahlia** | 41.4 | - | 12.6 | 4 | 58.0 | 67.9 | 221.5 | 87.5 | 18.4 | 0.4 | 395.7 | | **453.7** |
| **Beheira** | 6.5 | 3.9 | 0.17 | - | 10.6 | 31.8 | 10.8 | 103.1 | 71.3 | 18.6 | 235.6 | | **246.2** |
| **Sharkia** | 63.2 | - | - | 0.05 | 63.3 | 42.5 | 27.5 | 100.7 | 46.6 | 0.02 | 217.32 | | **280.6** |
| **Gharbia** | 33.3 | - | 2.0 | - | 35.3 | 24.5 | 16.9 | 50 | 39.7 | - | 131.1 | | **166.4** |
| **Damietta** | - | - | 14.5 | 10.3 | 24.8 | 4.4 | 18.5 | 8.7 | 1.9 | - | 33.5 | | **58.3** |
| **Fayoum** | - | - | - | 26.1 | 26.1 | - | 0.8 | 0.6 | 0.8 | - | 2.2 | | **28.3** |
| **Other Gov.** | 27.1 | | | | 27.1 | 14.3 | - | 3 | 0.7 | 6.28 | 24.28 | | **51.4** |
| **Total** | **171.6** | **4.3** | **29.9** | **65.9** | **271.6** | **280.9** | **386.1** | **387.1** | **216.3** | **25.5** | **1295.9** | **0** | **1567.5** |
| **% Total** | **10.9%** | **0.3%** | **1.9%** | **4.2%** | **17.3%** | **17.9%** | **24.6%** | **24.7%** | **13.8%** | **1.6%** | **82.7%** | | **100.0%** |

***Source:*** Ministry of Agricultural and Land Reclamation (MALR)

Sakhas 101 and 102. Sharkia has 46.3% of its paddy area in Sakha 101, and 23.0% in Giza 171. Gharbia divides its paddy area relatively evenly among four varieties: Gizas 171 & 177 and Sakhas 101 and 102.

## 2.2 Divergence in Estimates of Area Cultivated to Paddy

Table 2-4 shows MALR and MWRI area planted to paddy during the last 12 years. Note that the GOE considers only the MALR figures as official estimates, though the MWRI estimates (made by the Acreage Authority) indicate how large paddy crops are likely to have been and industry participants and knowledgeable observers tend to place more credence in the MWRI estimates, which are not published or announced by the GOE. MVE estimates that the paddy crop was planted on a larger area, perhaps 1.7 or 1.8 million feddans, than MALR announced in 1999. The MWRI estimate for 2000 is 28.6% larger at 2.02 million feddans, than the MALR estimate of 1.57 million feddans. This is the largest percentage divergence from1987 through 2000, the period for which data are available. Preliminary figures for 2001 show that the MALR area estimate exceeded the MWRI estimate, for the first time since 1994, by 4.8%.

It is ironic that as producer freedom to choose which crops they may cultivate has increased, and as the rice market has become increasingly liberalized, the divergence in MALR and MWRI estimates of paddy area has also widened, particularly for the period 1998 to 2000. This incongruity is inconsistent with the overall thrust of the agricultural liberalization program. As markets are liberalized, governments typically invest less in controlling farmers and traders and more in improving agricultural extension and market information, and in regulating (rather than trying to control) markets. Better crop area estimates, crop production forecasts, and market information increase overall transparency in commodity subsectors.

Industry sources continue to observe privately that MALR rice statistics are politically manipulated. Yields rise every year, even in universally acknowledged poor crop seasons (such as 1998), and area estimates do not outstrip targets by too large a margin. Traders, millers and exporters note that knowledge of domestic production, stocks and prices remains limited, which makes decisions about how much paddy to buy when, how much to store for how long, forward sales, and investments a guessing game. Individual traders, millers and exporters operate in an environment of incomplete information, which heightens risks and makes other countries perceive Egyptian suppliers as less than fully reliable trade partners. Furthermore, policy shifts, such as the early January 2001 announcement of a paddy buying price of LE 500/mt and the late January 2001 announcement of rice export subsidies, tend to destabilize the domestic market, leading to wide swings in prices and returns.

MWRI estimates of paddy area cultivated may also be subject to some manipulation, though observers think that the upward bias may be minimal. MWRI calculates consumptive water use for different crops, and it controls irrigation water delivered by major irrigation channel to rice growing areas. Although this process is becoming more scientific and precise over time, with innovations such as telemetry, it has historically been crude and approximate. Water released from the Aswan High Dam takes about 12-14 days to come down the Nile, work its way through elaborate Delta irrigation channels, and end up in the Mediterranean. MWRI needs to know in

**Table 2-4: MWRI and MALR Estimates of Paddy Area Cultivated, 1990-2001**

(area in feddans)

| Year | MWRI Estimates | | | MALR Estimate of Area | % MWRI Estimate > MALR Estim. |
|---|---|---|---|---|---|
| | Allowable Area | Actual Area | Percent Difference | | |
| **1990** | | 1,217,151 | | 1,036,345 | 17.4% |
| **1991** | | 1,222,057 | | 1,099,659 | 11.1% |
| **1992** | | 1,315,617 | | 1,214,527 | 8.3% |
| **1993** | 1,052,039 | 1,328,263 | 26.3% | 1,276,295 | 4.1% |
| **1994** | 1,084,760 | 1,318,121 | 21.5% | 1,377,710 | -4.3% |
| **1995** | 1,084,760 | 1,501,285 | 38.4% | 1,400,020 | 7.2% |
| **1996** | 1,086,530 | 1,418,287 | 30.5% | 1,405,268 | 0.9% |
| **1997** | 1,086,530 | 1,565,933 | 44.1% | 1,527,519 | 2.5% |
| **1998** | 1,086,530 | 1,500,000 | 38.1% | 1,224,955 | 22.5% |
| **1999** | 1,086,530 | 1,788,904 | 64.6% | 1,559,095 | 14.7% |
| **2000** | 1,052,072 | 2,017,231 | 91.7% | 1,568,936 | 28.6% |
| **2001** | 1,067,625 | 1,306,223 | 22.3% | 1,368,883 | -4.6% |

Sources: MPWWR and APRP/EPIQ, Report No. 6, June 1998.

*MPWWR and Water Resources Strategic Research Activity*, Report No. 8, August 1996.

Notes: 1) The "MWRI" estimates for 1998 and 1999 are MVE estimates, based on informal industry estimates (1998) and MVE's calculation of how large area cultivated might have been in 1999 (see footnote 1, first page of this chapter).

2) The "allowable area" for 1998 and 1999 was assumed to be equal to the area allowed in 1996 and 1997.

3) The MWRI allowable area and estimated area for 2000 and 2001 came from internal MWRI files.

advance the cropping pattern, which is now indicative rather than controlled by the GOE, in order to gauge water use requirements. Area planted to paddy, a high water-consuming crop, is an important variable in the equation for calculating the volume and timing of High Dam water releases. Since there is inevitably unaccounted for water diversion and misuse, not fully captured in the MWRI models, MWRI probably has an incentive to overstate, slightly, rice area planted so that releases from the High Dam balance supposed crop water use requirements.

Regardless of whichever set of figures one chooses to believe, the accuracy and timeliness of estimates of major cultivated crop areas need to be improved. The large divergence between MALR and MWRI figures in some years suggests that the current data collection system could be strengthened. MVE has worked closely with MALR/EAS to improve cotton yield estimates during the 2000 and 2001 growing

seasons (see Morsy et al., *Short-Term Cotton Forecasting in Egypt*, July 2000).[9] The approach developed (and the lessons learned from applying this approach to cotton and wheat) was also applied to rice (and maize) in summer 2001. Note that USAID/Cairo procured technical assistance to improve forecasts and estimates of citrus yields in 2001 it would be useful to find similar exercises for rice and maize.

### 2.3 Estimated Paddy Area in 2001

Note that the preliminary area estimates of paddy area in 2001, 1.37 million feddans, fall closer to the MALR's medium- to long-run goal of 1.0 million feddans. Industry participants place paddy area in the 1.1 to 1.3 million feddan range. The large decline in area planted to paddy in 2001 relative to 1999 and 2000 reflects, however, more of a short-run response to low prices and poor returns to rice cultivation in 2000 than a longer-run adjustment, consistent with policy-makers' wishes. If returns to rice production are high in 2001, while returns to cotton[10] and maize production are disappointing in 2001 (as area has increased to both alternative crops to rice), it is not unlikely that summer 2002 will witness a shift back to cultivating larger areas to paddy. The cotton and rice area shifts of the last several years are reminiscent of the familiar cobweb theorem, where low returns to cotton in 1998 and 1999 led producers to shift to rice in 1999 and 2000, while low returns to rice in 2000 have encouraged farmers to plant more cotton in 2001. Price swings appear to be more volatile under the traditional cobweb theorem, exacerbating swings in area and in output.

MALR planners intend that national rice output will be maintained on a lower cultivated area through higher yields. MALR rice breeders and agronomists report that the short-season varieties are higher yielding than the longer-season varieties. As shown in Table 2-2, estimated 2000 yields for all the shorter-season varieties, including Giza 178, Giza 181, and Sakha 101/102, are essentially 4.0 mt/feddan or higher, while those of Giza 177 lag a bit at 3.78 tons per feddan. This contrasts sharply with an estimated 3.09 for Giza 171/172 and 3.21 for the popular *reho*, Giza 173.

[9] MVE also worked closely with MALR/EAS in 2000/01 to improve estimation of wheat yields. See Morsy et al., *Short-Term Wheat Yield Forecasting in Egypt: An Assessment*, April 2001.

[10] Note that cotton industry participants forecast lower seed cotton and export prices for cotton in 2001/02, although the GOE has assured cotton producers that they will receive comparable prices to 2000/01.

## 3. OPERATION AND PERFORMANCE OF THE RICE MARKET DURING THE 2000/01 SEASON

This section discusses the operation and performance of the rice marketing system during the 2000/01 season and offers a final assessment of developments during the 1999/2000 rice marketing and export season (as the *Rice Subsector Baseline Update* of January 2000 covers only the first five months of the 1999/2000 season).

### 3.1 Performance during the 1999/2000 Season

The *Rice Subsector Baseline Update*, published in January 2000, covered the 1999/2000 rice marketing season through its first 4-5 months. The first part of the marketing season—from mid-August 1999 to late December 1999—was characterized by high wholesale paddy prices of LE 600-700/mt, well above the LE 450-500/mt into-mill prices of the previous year. There were two reasons for these high paddy prices. First, opening stocks in the 1999/2000 were far lower (at an estimated 173,600 mt milled rice equivalent) than they were in 1998/99. This was a marketing season during which the estimated net change in stocks was -883,600 mt of milled rice equivalent (see Table 3-1), due to the poor 1998 crop and massive drawing down of large stocks carried over from the 1997/98 rice marketing season. Second, the GOE announced minimum producer paddy prices of LE 600/mt in August 1999,[11] which were paid by the public and ESA mills during the first four months of the 1999/2000 marketing season.[12] The active public sector presence in the market, from the very beginning of the 1999/2000 season, was critical in maintaining high paddy prices, despite the very large paddy crop of nearly 1.8 mmt. *The ESA and public mills ended up being the de facto implementing agents of the GOE's price policy decision.* In addition, the fact that the rice "crisis" of spring 1999 propelled paddy and milled rice prices to unusually high levels in the late spring and early summer of 1999 was an additional psychological factor that probably contributed to higher early season paddy prices in 1999/2000 than in 1998/99.

When the RFM-HC was merged into the Food Industries Holding Company (FIHC) in December 1999, the FIHC inherited the problem of sizeable paddy stocks, bought at high prices (LE 600-700/mt), following a record harvest. By the end of the fiscal year of the ESA and public mills (30 June 2000), only about half of the paddy procured from September to December 1999 had been milled. The rest remained in storage. Miller stocks of this magnitude that late in the marketing season were evidence of the fact that the public mills bought too much paddy at high

[11] Public statements by H.E. Minister Youssef Wally in August 1999 that farmers should receive no less than LE 600/mt for their paddy set the general level of paddy prices early in the 1999/2000 marketing season.

[12] ESA mills, obtaining bank finance through RFM-HC guarantees, bought 402,000 mt of paddy by early December 1999 and then exited the market. Early and aggressive buying by the ESA and public mills pushed early season paddy prices far higher in 1999/2000 than during the opening months of the previous marketing season (1998/99), when the public and ESA mills bought only 96,300 mt.

## Table 3-1 : Paddy & Rice Supply and Use Estimates, 1990/91-2001/02 (from GOE data sources)

| | Paddy | | | | | | | Milled Rice | | | | | | | | | | | | Estim. Year End Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Paddy Area '000 fd | MALR Estim. Yield mt/fd | MVE Yield Adjustmt. mt/fd | Paddy Prod. '000 mt | Seed Requirmt. '000 mt | Estim. Paddy Losses '000 mt | Paddy Balance '000 mt | Milled Rice Equivalent '000 mt | Exports '000 mt | Imports '000 mt | Net Exports '000 mt | Quantity Avail. for Cons. '000 mt | Adj. Quan. Avail. for Cons. '000 mt | Resident Pop. mill. | Estim. Rice Cons. '000 mt | Cons. Per Capita kg. | Opening Stocks (milled) '000 mt | Estim. Year End Stocks '000 mt | Calculated Change in Stocks '000 mt | '000 mt Paddy |
| 1990/91 | 1037 | 3.01 | 2.71 | 2809.2 | 55.4 | 280.9 | 2472.9 | 1607.4 | 136.0 | 2.38 | 75.7 | 1531.7 | 1455.1 | 53.50 | 1476.6 | 27.6 | 25.0 | 3.5 | -79.9 | 5.4 |
| 1991/92 | 1100 | 3.32 | 2.99 | 3286.8 | 61.2 | 0.3 | 2896.9 | 1883.0 | 176.4 | 3.80 | 172.7 | 1710.3 | 1624.8 | 54.61 | 1556.5 | 28.5 | 3.5 | 71.8 | 0.8 | 110.4 |
| 1992/93 | 1215 | 3.40 | 3.06 | 3717.9 | 64.6 | 371.8 | 3281.5 | 2133.0 | 133.2 | 0.06 | 133.1 | 1999.8 | 1899.8 | 55.75 | 1644.7 | 29.5 | 71.8 | 326.9 | 267.8 | 502.9 |
| 1993/94 | 1282 | 3.43 | 3.09 | 3957.5 | 69.5 | 395.8 | 3492.3 | 2270.0 | 251.7 | 0.09 | 251.6 | 2018.4 | 1917.5 | 56.92 | 1741.6 | 30.6 | 326.9 | 502.8 | 282.5 | 773.5 |
| 1994/95 | 1378 | 3.52 | 3.17 | 4365.5 | 70.6 | 436.6 | 3858.4 | 2508.0 | 127.8 | 0.34 | 127.5 | 2380.5 | 2261.4 | 58.10 | 1847.6 | 31.8 | 502.8 | 916.6 | 617.4 | 1410.1 |
| 1995/96 | 1400 | 3.42 | 3.08 | 4309.2 | 70.8 | 430.9 | 3807.5 | 2474.9 | 355.2 | 0.80 | 354.4 | 2120.4 | 2014.4 | 59.31 | 1965.6 | 33.1 | 916.6 | 965.4 | -43.6 | 1485.2 |
| 1996/97 | 1405 | 3.48 | 3.13 | 4400.5 | 78.5 | 440.0 | 3881.9 | 2523.3 | 166.2 | 0.31 | 165.9 | 2357.4 | 2239.5 | 60.44 | 2142.0 | 35.4 | 965.4 | 1062.9 | -2.5 | 1635.2 |
| 1997/98 | 1557 | 3.52 | 3.17 | 4932.6 | 61.7 | 493.3 | 4377.6 | 2845.4 | 409.2 | 0.69 | 408.5 | 2436.9 | 2315.1 | 61.59 | 2321.9 | 37.7 | 1062.9 | 1056.1 | -6.8 | 1624.7 |
| 1998/99 | 1225 | 3.63 | 2.86 | 3500.0 | 89.7 | 350.0 | 3060.3 | 1989.2 | 308.2 | 38.00 | 270.2 | 1719.0 | 1633.0 | 62.76 | 2516.6 | 40.1 | 1056.1 | 172.5 | -883.6 | 265.4 |
| 1999/00 | 1780 | 3.73 | 3.36 | 5975.5 | 101.7 | 597.5 | 5276.3 | 3429.6 | 337.9 | 1.00 | 336.9 | 3092.7 | 2938.0 | 63.95 | 2717.9 | 42.5 | 172.5 | 392.6 | 220.1 | 604.0 |
| 2000/01 | 2017 | 3.83 | 3.45 | 6952.6 | 65.8 | 695.3 | 6191.5 | 4024.5 | 600.0 | 1.00 | 599.0 | 3425.5 | 3254.2 | 65.17 | 2932.5 | 45.0 | 392.6 | 714.4 | 321.7 | 1099.0 |
| 2001/02 * | 1306 | 3.83 | 3.45 | 4501.8 | 75.6 | 450.2 | 3957.0 | 2584.4 | 300.0 | 1.00 | 299.0 | 2285.4 | 2171.1 | 66.40 | 2822.2 | 42.5 | 714.4 | 63.3 | -651.0 | 97.4 |

Sources: MALR, MSHT, MWRI, CAPMAS, IFPRI Household Survey, Univ. of Arkansas Rice Study (1995), and MVE estimates.

* 2001/02 figures are MVE forecasts. Exports are a guesstimate and could end up being lower.

Notes: 1) Data are reported by production year, but the marketing year runs from 15 September of the production year to 15 September or 1 October of the following calendar year.

2) MALR production estimates are assumed to be high. They are adjusted downward by using a 10% yield correction factor. In other words, national average yields are assumed to be 90% of the reported MALR figures. The exception is 1998/99, where the yield is calculated based on an estimated crop of 3.5 million mt (reflecting the private trade's best estimates of the size of the crop).

3) Post-harvest losses of paddy are assumed to be 10%. Some of these "losses" to human consumption can be fed to livestock. Netting out losses yields the paddy balance from the current rice crop (does not include earlier year carryover).

4) Seed requirements are calculated as 50.4 kg. per feddan (or 120 kg./ha.) * the area planted in the following year. Year 2001/02 area planted is assumed to 1.3 million feddans.

5) The average (milling rate) of conversion of paddy into milled rice is assumed to be 65%. Public mills and private commercial mills sometimes obtain higher conversion rates (67-70%), but small village mills often achieve lower rates than 65%.

6) Calendar year, rather than market year, statistics are used for imports of rice. Given the generally negligible import volumes, this does not pose a problem. Imports for 1999/00 and 2000/01 are assumed to be 1,000 mt.

7) Estimated quantity available for total consumption is calculated as a residual for the current year (the milled rice equivalent of the paddy balance less net exports). This estimate is then adjusted downward for 5% losses in bagging, handling & transport of milled rice.

8) Population figures are for the resident population only, based on GOE censuses at ten-year intervals (1986, 1996). The growth rate per year was 2.085% from 1986 to 1996, and 1.9% since 1996.

9) Estimated consumption figures are from MALR Food Balance Sheets to 1994/95, calculated for 1997/98 (as the IFPRI/EIHS per capita consumption estimate * population), and interpolated for 1995/96 and 1996/97. Consumption is adjusted upward for 1998/99 to 2000/01, though assumed to fall in 2001/02 as supplies are tighter and prices higher.

10) Per capita consumption is estimated from MALR Food Balance Sheets to 1994/95, from the IFPRI EIHS for 1997/98, interpolated for 1995/96 and 1996/97, and extrapolated for 1998/99 to 2000/01. In 2001/02, per capita consumption is assumed to drop off its peak in 2000/01.

11) Milled rice stocks at the end of the marketing year are calculated as a residual. We assume that opening stocks in September 1990 were 25,000 mt of milled rice, equivalent to 33,000 mt of paddy. End stocks equal opening stocks + quantity available for consumption - estimated consumption.

12) Milled rice equivalent stock changes are calculated from the table. Most stocks are stored as paddy, not milled rice, however, so the paddy equivalent stocks can be estimated as the milled rice equivalent stocks divided by 0.65.

prices earlier in the season. Once prices dropped in the mid-summer of 2000, it became difficult for the public/ESA mills to mill the paddy bought in the early season profitably. The FIHC Chairman, Adel Shahawy, went on the record with the Egyptian press, expressing his dissatisfaction with this inherited situation.

As shown in Table 3-2 and depicted in Figure 3-1, wholesale into-mill paddy prices hit their peaks in December 1999 and January 2000, yet remained at high levels during the five ensuing months. They then dropped markedly (23-35%) in July-August 2000, as the record size of the summer 2000 crop was becoming apparent. Producers and traders began to sell 1999 paddy stocks that they had been holding in anticipation of a seasonal price run-up like the unusually strong one of 1998/99. By mid-summer 2000, it had become very clear that such a run-up would not take place. The mid-summer collapse in paddy prices set the tone for very low opening prices paid to producers and by millers to traders in 2000/01. Opening prices in the fall of 2000 were 29-37% off their opening levels of 1999/2000 and remained low for most of the marketing season (up to June-July 2001). Prices rose steeply in July 2001, dropped in August (as 2000 crop year paddy was disposed), but increased sharply in October and November 2001.

## 3.2 The Rice "Crisis" of 2000/01

As discussed in the *Rice Subsector Baseline Update* of January 2000, the rice crisis of 1998/99 was due to the small 1998 crop, leading to a spike in domestic paddy and rice prices in the spring of 1999. This provided an incentive to several traders to import sizeable quantities of Chinese rice, a first for Egypt. The high prices, perception of scarcity, and the large imports in June-July 1999 likely influenced the mind-set of producers, traders and millers, who expected high early season paddy prices in 1999/2000. If the rice crisis of June-July 1999 had not taken place and been accompanied by so much attention in the press, paddy prices in September-December 1999 would probably have been lower than they were.

The rice crisis of 2000/01 was not one of scarcity; rather, it was one of plenty—a record paddy crop in the summer of 2000—and exceptionally low producer prices. While Table 3-2 shows MVE's best estimate of the range of into-mill wholesale prices, paid by commercial millers to wholesale paddy traders, producers received quite a bit less, LE 20-40/mt. Table 3-2 shows that into-mill paddy prices had dropped 27 to 41 percent in October-December 2000 relative to September-October 1999. Delta rice producers reported receiving paddy prices in the LE 350 to 400 range after the harvest, 40-50% lower than the attractive prices of September-December 1999.

While there are no quantitative estimates of how much paddy gets sold during the first four months of the rice marketing season (mid-August to mid-December), subsector participants estimate that early season sales constitute 60-80% of farmer sales over the entire marketing season. Figures 3-2 and 3-3 show schematically MVE's best guesstimates of the seasonal pattern of producer sales, wholesale trader sales, milling activity, and exports. Much of the paddy crop is sold early in the marketing season

to meet producers' seasonal expenses: paying farm labor, paying off production loans (generally from PBDAC), and paying school-related fees. In 2000/01, therefore, it is safe to assume that much of the commercialized part of the 2000 summer

## Table 3-2: Into-Mill Wholesale Paddy Prices (LE/mt), by Variety, September 1999-November 2001

| Mo./ Variety | Giza 171 | Index | Giza 177 | Index | Giza 178 | Index | Sakha 101 | Index | Sakha 102 | Index |
|---|---|---|---|---|---|---|---|---|---|---|
| *1999/2000 Marketing Year* | | | | | | | | | | |
| Sep-99 | - | - | 680-700 | 100 | 630-650 | 100 | 620-630 | 100 | 600-620 | 100 |
| Oct-99 | 670-700 | 100 | 620-640 | 91 | 620-640 | 98 | 600-620 | 98 | 620-640 | 103 |
| Nov-99 | 650 | 95 | 600-620 | 88 | 600-620 | 95 | 570 | 91 | 620 | 102 |
| Dec-99 | 620-630 | 91 | 560-580 | 83 | 560-580 | 89 | 570 | 91 | 560 | 92 |
| Jan-00 | 750 | 109 | 700-710 | 102 | 660-670 | 104 | 640-650 | 103 | | |
| Feb-00 | 720-750 | 107 | 690 | 100 | 650-680 | 104 | 670 | 107 | | |
| Mar-00 | 680-710 | 102 | 680 | 99 | 630 | 98 | 660-670 | 106 | | |
| Apr-00 | 700 | 102 | 680 | 99 | 600-630 | 96 | 670 | 107 | | |
| May-00 | 700 | 102 | 680-690 | 99 | 630-640 | 99 | 650 | 104 | | |
| Jun-00 | 690-710 | 102 | 680-700 | 100 | 620-650 | 99 | 490-530 | 82 | 410-440 | 70 |
| Jul-00 | 500-540 | 76 | 500-540 | 75 | 420-450 | 68 | 500 | 80 | 410 | 67 |
| Aug-00 | 530 | 77 | 520 | 75 | 400-410 | 64 | 420-440 | 69 | 400 | 66 |
| *2000/01 Marketing Year* | | | | | | | | | | |
| Sep-00 | | | 440-460 | 65 | 400-410 | 63 | 430-460 | 71 | 410 | 67 |
| Oct-00 | 460-480 | 69 | 430-450 | 64 | 380-420 | 63 | 430-450 | 70 | 410 | 67 |
| Nov-00 | 470-500 | 71 | 460-480 | 68 | 390-430 | 64 | 440-470 | 73 | 420 | 69 |
| Dec-00 | 460-490 | 69 | 410-460 | 63 | 340-410 | 59 | 420-465 | 71 | 410-465 | 72 |
| Jan-01 | 460-480 | 69 | 420-470 | 64 | 390-410 | 63 | 440-470 | 73 | 430-470 | 74 |
| Feb-01 | 470-520 | 65 | 410-465 | 63 | 360-420 | 61 | 420-470 | 71 | 420-470 | 73 |
| Mar-01 | 470-500 | 71 | 410-480 | 64 | 360-420 | 61 | 425-485 | 73 | 450-485 | 77 |
| Apr-01 | 480 | 70 | 420-475 | 65 | 375-425 | 63 | 420-450 | 70 | 450 | 74 |
| May-01 | 460 | 67 | 450-460 | 66 | 380-390 | 60 | 450-460 | 73 | 420-430 | 70 |
| Jun-01 | 450 | 66 | 460-465 | 67 | 420-425 | 66 | 460-465 | 74 | 460-465 | 76 |
| Jul-01 | 530 | 77 | 530-570 | 80 | 520-545 | 86 | 530-570 | 88 | 540-570 | 91 |
| Aug-01* | 460 | 67 | 470-490 | 70 | 390-410 | 63 | 470-490 | 77 | 440-450 | 73 |
| Sept-01* | | | 490-500 | 72 | 400-430 | 65 | 490-505 | 80 | 450-460 | 75 |
| Oct-01 | 640-680 | 96 | 490-530 | 74 | 430-500 | 73 | 500-530 | 82 | 470-500 | 80 |
| Nov-01 | 720-750 | 107 | 570-650 | 88 | 490-600 | 85 | 570-650 | 98 | 540-600 | 93 |

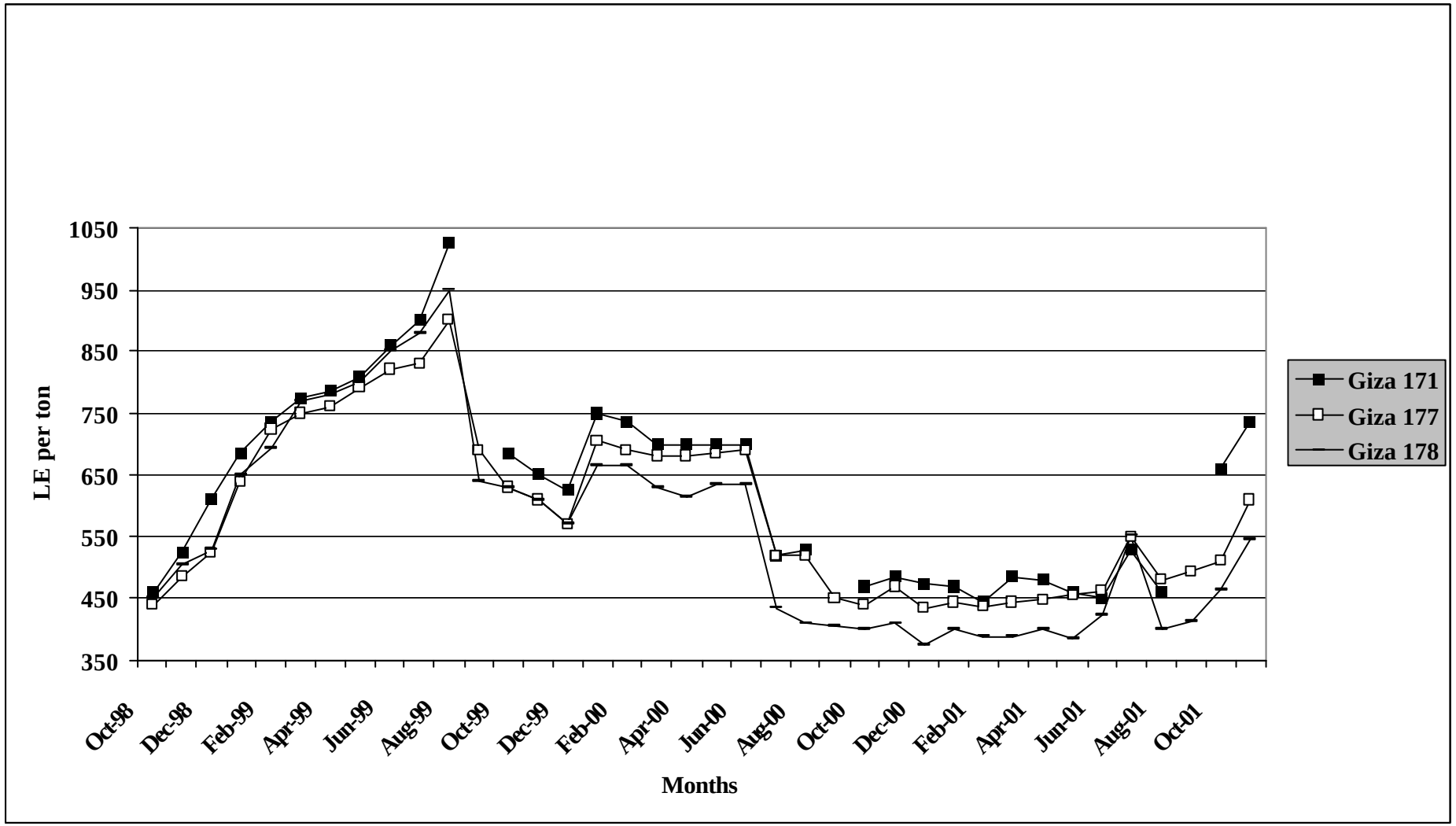
Sources: 1) Cereals Industry Chamber, Rice Branch monthly meeting notes. 2) MVE notes from interviews with rice millers and exporters.

Notes: The indexes are calculated by taking the simple mean of the range for each month and then comparing this to the base month, Oct. 1998. The prices reported are indicative and not a substitute for

prices obtained from a scientific and representative sample. Since Giza 171 is harvested in October, there is no price quote for Sept. 1999 or Sept. 2000. There are no quotes for Sakha 102 for Jan.-May 2000.

* Old paddy (from the summer 2000 crop) was sold at about LE 10-20/mt higher than the new crop for the same varieties, especially in Beheira, Kafr El-Sheikh, and Gharbia. Old crop grains are drier (low moisture rate).

**Figure 3-1: Into-Mill Wholesale Paddy Prices for Three Major Traded Varieties, Oct. 1998 - Nov. 2001**



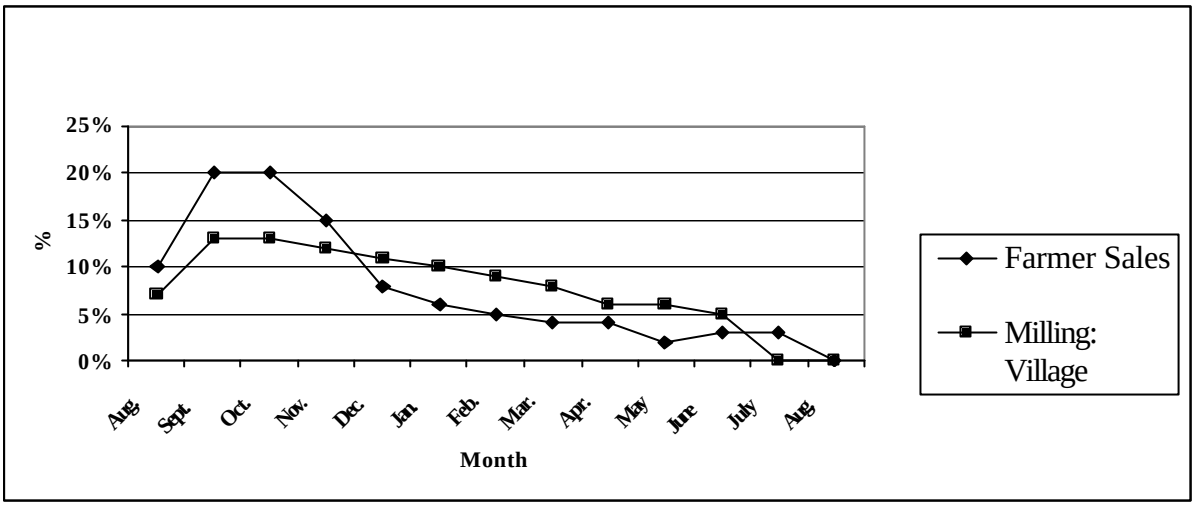



**Figure 3-2: Distribution of Farmer Paddy Sales and Milling in Villages, by Month**

Source: Derived from informal interviews with paddy traders, village millers, and commercial millers.
Notes: The monthly percentages sum to 100% of total farmer sales and 100% of the total quantities milled by small village mills. The estimated percentages by month should be taken as illustrative and indicative only.

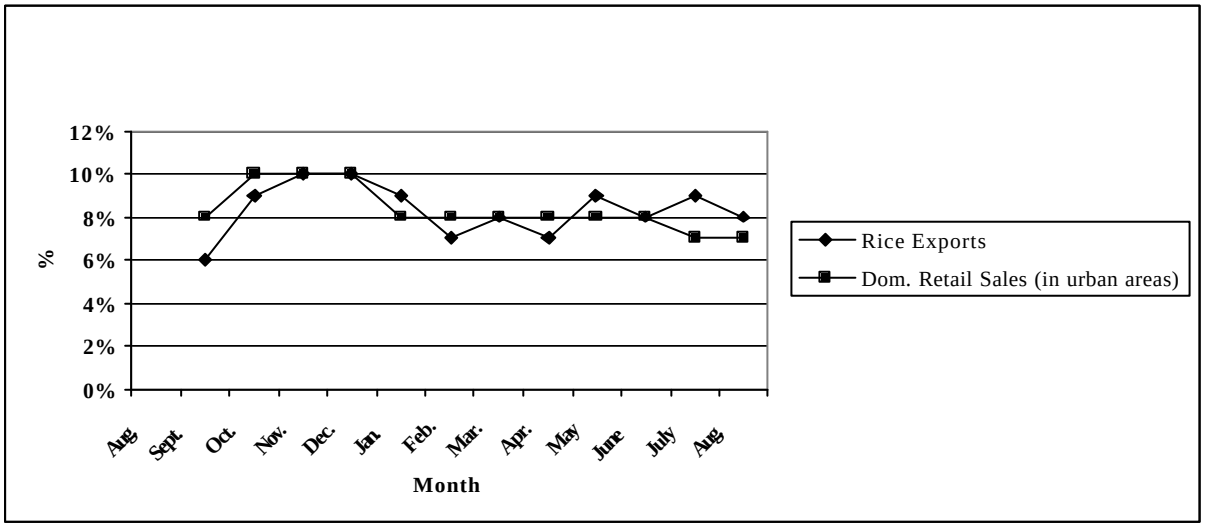



**Figure 3-3: Estimated Distribution of Rice Exports and Domestic Retail Sales (in Urban Areas), by Month**

Sources and Notes: Rice exports per month were calculated from actual CAPMAS monthly rice export data, September 1996 through August 2001. The monthly percentages sum to 100% of total rice exports. The distribution of domestic retail sales is derived from interviews and observation, though it should be regarded as illustrative.

crop sold by farmers, perhaps as much as 70-80%, was bought by wholesale traders and millers during the first four months of the marketing season. Many producers claimed that their returns were negative. There were also reports of farmers feeding paddy to livestock, because buyers' offer prices were so unattractive.

A widespread, generalized dissatisfaction with low paddy prices prompted a People's Assembly inquiry in early January 2001. Several vocal MPs chastised the Prime Minister and the Minister of Agriculture for abandoning farmers to the vicissitudes of the free market. The Egyptian press had a field day (see several articles in Annex 4), and the GOE was clearly embarrassed by all the negative publicity. Minister Wally was quick to announce (on 13 January 2001) a minimum paddy price of LE 500/mt in support of farmers. Most millers and exporters pointed out, however, that this price was announced too late to do much good for farmers, who had already sold most of their paddy earlier. Skeptics stated that the announced higher paddy price would benefit wholesale traders, not producers, who had accumulated sizeable stocks early in the season and were storing the paddy in anticipation of higher into-mill wholesale prices later in the season. What these traders would receive, they claimed, was a windfall gain from storing paddy for a relatively short period, thanks to ill-timed GOE intervention in the market.

Although Minister Wally's announcement had the very short-run effect of increasing into-mill wholesale prices, paddy prices remained soft for the following five months (January to early/mid June 2001). Private market participants basically ignored the minimum price. Very few transactions were made at LE 500/mt, mainly by ESA mills who were not keen to buy at inflated wholesale prices, as they had done early in the 1999/2000 marketing season. Unlike that season, when the ESA and public mills obtained finance early and bought large quantities of paddy on spec, the ESA mill paddy purchases in 2000/01 were tied tightly to specific, negotiated government-to-government rice export deals, with Libya and Syria being the principal clients (see discussion in Chapter 4).

Minister Wally's announced minimum price partially defused the rice crisis. Another safety valve was the 23 January 2001 decision by the Cabinet (with the strong backing of the Rice Subcommittee of the ACC and the MFT) to introduce export subsidies on Egyptian rice, including cargo and paddy. A short time before this the GOE had announced that paddy exports were permitted, largely in response to the bumper 2000 rice crop and the need to dispose of it in a timely manner.

Although not mentioned by the GOE or the press, another factor driving this decision was the realization that Egyptian exports had been losing ground in the critical Turkish market to American exporters of medium-grain rice, who had been shipping Arkansas and Louisiana paddy to Turkey for a couple of years at deep discounts. This had cut into Egypt's market share, while U.S. exports were higher in 1999/00 (231,000 mt) and 2000/01 (171,000 mt) relative to 1998/99 (100,000 mt). Turkey has significant installed rice milling capacity that the Turkish Government, under pressure from private millers, wishes to use. Note that Egypt's exports to Turkey reached 113,000 mt in 2000/01, nearly attaining the 1997/98 record level of 118,000 mt, which was a dramatic improvement over the previous two years (of 66,900 mt in 1998/99 and 66,400 mt in 1999/00).

### 3.3 Subsidy on Rice Exports as of Late January 2001

The MFT announcement of a rice export subsidy was welcomed by exporters and millers, who cited unusually low world rice prices as the impetus for such a measure. Rice export prices were indeed as low as they had been in fifteen years. The Rice Subcommittee of the ACC played a key role in lobbying the GOE for this subsidy.[13] Several millers and exporters refuse to acknowledge that there was a direct subsidy on rice exports, preferring to call it support to producers, who received low prices during 2000/01.

The subsidies were announced on 23 January 2001 and implemented as of 24 January. All milled rice, processed from the varieties Giza 177, Sakhas 101/102, and Giza 171 and then exported, would receive subsidy payments of LE 100/mt. Exports of milled Giza 178, a less desired export variety, would receive subsidies of LE 200/mt. The implementing agent for paying the subsidy was the Export Development Bank, acting on MFT instructions. Recorded rice exports between 15 January 2001 and 30 September 2001 were an estimated 599,500 mt. This provided a stimulus to the market, although into-mill paddy prices remained rather low. Assuming that one-third of the subsidized rice exports were Giza 178, the cost of the subsidy payments is estimated to be LE 79.1 million or $19.97 million.[14]

Egyptian exporters claim that importers quickly learned of the subsidy payments and adjusted their offers downward, by the amount of the subsidies, within 10 days. If this is true, the subsidies represent an indirect income transfer to importers and foreign consumers. Exporters report that the subsidies allowed them to achieve a record level of rice exports in 2000/01, maintain market shares in traditional markets (mainly in the Eastern Mediterranean), raise exports in Eastern European and NIS markets (where Egypt lost market share in 1999/00), and compete head-to-head with Asian rice exporters in COMESA markets. But they insist that their net returns are modest at $5-10/mt. Despite this claim, participation in exporting did expand in this record export marketing season. The expansion in participation, particularly the entry and enhanced participation of many small exporters, is one reason returns are low, according to the large-volume exporters. The latter claim that the hyper-competition can be ruinous, particularly when small exporters fail to honor contract specifications (mixing varieties), ship late, or do 1-2 shipments (hoping to make a killing in the short run) and then exit the business. The larger exporters claim that Egypt's reputation as an exporter of rice is fragile and can be undermined

[13] The only written reference to the subsidy that MVE could find was in the meeting notes of the ACC Rice Sub-Committee, dated January 31, 2001. The meeting notes stated that the rice sub-committee had submitted a memorandum to the Minister of Economy and Foreign Trade at the time discussing the huge losses incurred by exporters as a result of setting 500 LE/mt as a minimum price. Based on this memorandum, the Minister formed a committee to study the situation in the rice market. A study was conducted, in which the Rice Sub-Committee explained that a subsidy of 100 LE/mt is necessary in order to achieve the target of exporting 400,000 mt. The subsidy was approved by the Ministerial Cabinet on January 23, 2001.

[14] The dollar value of rice export subsidies is calculated by taking exports during periods (generally months) of the marketing season and dividing the estimated LE subsidy cost by the LE/$ exchange rate that applied during that period. Note that USDA/FAS reported that the subsidy payments cost the GOE less, LE 50 million, which is equivalent to about $12 million.

by small, unscrupulous shippers. While this is true, established exporters have reputations for being able to deliver rice to importers on a timely basis at fair prices, clients who prefer to use them, and well-established market shares in key markets. In the end, a competitive rice export business will reward exporters able to ship rice that meets specifications in a timely and reliable manner.

The contention that Egyptian rice export prices adjusted quickly downward, by the amount of the subsidies, is partially borne out by the data. Tables 3-3 and 3-4 show two rice export price series: FOB Alexandria prices for particular rice varieties and calculated unit values for Egyptian rice using aggregate monthly trade data (prepared by CAPMAS). The FOB Alexandria rice prices are methodologically preferable, as they refer to specific rice export varieties. The unit values shown in Table 3-4 are an average of all types of rice exported, including higher-grade *camolino,* lower-grade natural rice, cargo and pure brokens. Probably the best single price series would be *camolino* grade 2, which made up 53.1% of rice exports in 1998/99 and 45.9% of exports in 2000/01 (see Table 4-7). This rice type is shipped to Turkey and traditional Arab markets, such as Syria, Jordan, Lebanon, and Libya.

The unexpected rise in paddy and rice prices of June-July 2001 caught most exporters and millers by surprise, although prices appeared to moderate in early August 2001. It suggests that perhaps the size of the summer 2000 paddy crop was over-estimated and that wholesale traders had drawn down more quickly on their stocks during the course of the 2000/01 season than had been believed. It probably also reflects the wide spread realization that the 2001 crop would be much smaller, as paddy was cultivated on far less land in 2001 (1.1-1.3 million feddans) than in 2000. With a modest 2001 crop, exports of 500,000 mt or more of rice will most likely not be attained, with exports in the 250,000-350,000 mt range more probable. Domestic consumption also expands each year, as the population increases, as more rural consumers eat rice outside rice-growing areas, and as rice consumption increases with rises in incomes.[15] Exporters correctly anticipated higher paddy prices in 2001/02, relative to 2000/01, despite continued softness in the international rice market, and reduced exports in 2001/02.

### 3.4 Rice Supply and Use during the 1990s and into 2000/01

The *Rice Subsector Baseline Update* report presented supply and use estimates from 1990/91 to 1998/99. Table 3-1 presents a modified set of estimates for the period from 1990/91 through 2000/01, with forecasts for 2001/02. This set of rice supply and use estimates differs from the first baseline report estimates in using the resident Egyptian population to estimate national rice consumption rather than the total Egyptian population, which includes some Egyptians working overseas. About 4.5% of

[15] Expenditure elasticities of demand are positive for rice consumption among all groups of consumers: rural and urban in the Delta and in Upper Egypt, as well as in metropolitan Egypt (Cairo, Alexandria). See the *Rice Subsector Baseline Report*, March 1999, for a discussion of rice consumption that relied heavily on IFPRI's demand analysis of the EIHS data.

the total population is non-resident for most or all of the year. This has the effect of decreasing estimated aggregate rice consumption in Egypt.[16]

[16] Note that resident expatriates in Egypt consume rice as well, though it is assumed that they are buying mainly the imported *basmati* and Uncle Ben's rice and consuming relatively little Egyptian rice.

## Table 3-3: Egyptian Rice Export Prices, November 2000-December 2001

($/mt)

| Year | Month | Gizas 177,101,102 | | | | | | Giza 178 | | | | | | Long-Grain Competitors | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Cargo Grade 2 | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Cargo Grade 2 | Thai 100% Grade B | Thai 5% Broken | US Long Grain 2/4 | Vietnam 5% Brokens |
| **Broken %** | | 3% | 6% | 12% | 15% | 20% | 6% | 3% | 6% | 12% | 15% | 20% | 6% | | | | |
| **2000** | Nov. | 263 | 255 | 238 | | | 206 | 237 | 222 | 218 | 204 | 196 | 190 | 194 | 188 | 281 | 180 |
| | Dec. | 262 | 247 | 235 | | 220 | 206 | 237 | 221 | 212 | 204 | 198 | 190 | 185 | 181 | 264 | 171 |
| **2001** | Jan. | 262 | 247 | 235 | | 220 | 206 | 237 | 221 | 212 | 204 | 198 | 190 | 183 | 178 | 264 | 170 |
| | Feb. | 265 | 250 | 240 | | 222 | 225 | 240 | 225 | 215 | 210 | 205 | 193 | 193 | 186 | 264 | 162 |
| | Mar. | | | | | | | | | | | | | | | | |
| | April | 230 | 215 | 203 | | 188 | 190 | 215 | 200 | 188 | 183 | 178 | 178 | 171 | 162 | 281 | 148 |
| | May | 200 | 192 | 185 | 181 | 177 | 185 | 161 | 153 | 144 | 140 | 136 | 156 | 172 | 164 | 253 | 144 |
| | June | | | | | | | | | | | | | 170 | 161 | 253 | 154 |
| | July | | | | | | | | | | | | | 178 | 168 | 253 | 150 |
| | Aug. | | | | | | | | | | | | | 172 | 165 | 270 | 170 |
| | Sept. | 214 | 206 | 198 | 194 | 190 | 206 | 175 | 167 | 158 | 153 | 149 | 175 | 178 | 173 | 242 | 174 |
| | Oct. | 227 | 220 | 214 | 213 | 210 | 206 | 203 | 195 | 192 | 189 | 187 | 185 | 174 | 170 | 226 | 175 |
| | Nov. | 233 | 224 | 218 | 216 | 213 | 203 | | 198 | 194 | 192 | 189 | 185 | 174 | 168 | 226 | 182 |
| | Dec. | | 302 | 295 | 260 | | 203 | | 250 | 235 | 231 | | 210 | 182 | 176 | 220 | 192 |

Source: London Rice Brokers' Association, *Monthly Circular*. Prices quoted are offers quoted at the beginning of each month.

1) As of November 2000, LRBA began to report prices by variety. Gizas 177 and Sakha 101/102 command higher prices than Giza 178.

2) LRBA reported that in June 2001, "Current quotes vary hugely between exporters due to the disturbed state of the market and cannot sensibly be reported."

3) There were no export price quotes in July and August 2001 (perhaps due to thinly traded volumes or export price volatility).

**Table 3-4: Monthly Volume and Value of Egyptian Rice Exports & Calculated Unit Values, September 1997 to November 2001**

| Year | Month | Value (mill. LE) | Value (mill. $) | Quantity (mt) | Unit Value (LE/mt) | Unit Value ($/mt) |
|---|---|---|---|---|---|---|
| **1997** | August | 13.3 | 3.9 | 10,625 | 1251 | 368 |
| | September | 16.9 | 5.0 | 13,893 | 1220 | 359 |
| | October | 23.2 | 6.8 | 17,425 | 1329 | 391 |
| | November | 40.5 | 11.9 | 37,385 | 1084 | 319 |
| | December | 42.3 | 12.4 | 37,765 | 1119 | 329 |
| **1998** | January | 40.5 | 11.9 | 36,114 | 1121 | 330 |
| | February | 27.5 | 8.1 | 24,380 | 1127 | 332 |
| | March | 22.6 | 6.7 | 21,110 | 1072 | 315 |
| | April | 23.0 | 6.8 | 22,316 | 1033 | 304 |
| | May | 33.2 | 9.8 | 34,636 | 960 | 282 |
| | June | 49.4 | 14.5 | 43,019 | 1149 | 338 |
| | July | 31.2 | 9.2 | 29,948 | 1041 | 306 |
| | August | 23.5 | 6.9 | 23,413 | 1003 | 295 |
| | September | 22.5 | 6.6 | 23,477 | 960 | 282 |
| | October | 34.5 | 10.1 | 39,747 | 868 | 255 |
| | November | 53.7 | 15.8 | 69,151 | 776 | 228 |
| | December | 95.3 | 28.0 | 54,419 | 1750 | 515 |
| **1999** | January | 31.1 | 9.1 | 35,217 | 882 | 260 |
| | February | 35.9 | 10.6 | 46,058 | 780 | 229 |
| | March | 48.1 | 14.1 | 46,701 | 1029 | 303 |
| | April | 17.9 | 5.2 | 18,969 | 941 | 276 |
| | May | 17.1 | 5.0 | 16,221 | 1056 | 310 |
| | June | 6.9 | 2.0 | 6,890 | 997 | 293 |
| | July | 7.9 | 2.3 | 7,406 | 1068 | 313 |
| | August | 3.4 | 1.0 | 3,133 | 1087 | 319 |
| | September | 13.9 | 4.1 | 12,859 | 1079 | 316 |
| | October | 41.6 | 12.2 | 43,840 | 948 | 278 |
| | November | 44.2 | 13.7 | 44,216 | 1000 | 310 |
| | December | 27.9 | 8.2 | 25,357 | 1101 | 322 |
| **2000** | January | 9.2 | 2.7 | 9,115 | 1013 | 296 |
| | February | 20.1 | 5.9 | 20,340 | 989 | 289 |
| | March | 19.8 | 5.8 | 18,553 | 1066 | 311 |
| | April | 22.9 | 6.7 | 21,939 | 1045 | 305 |
| | May | 38.1 | 11.1 | 36,690 | 1038 | 302 |
| | June | 28.4 | 8.2 | 26,260 | 1080 | 314 |
| | July | 18.0 | 5.2 | 17,495 | 1031 | 298 |
| | August | 19.4 | 5.6 | 19,295 | 1006 | 289 |

| Year | Month | Value (mill. LE) | Value (mill. $) | Quantity (mt) | Unit Value (LE/mt) | Unit Value ($/mt) |
|---|---|---|---|---|---|---|
| | September | 44.9 | 12.8 | 41,046 | 1093 | 312 |
| | October | 43.1 | 12.3 | 46,309 | 931 | 265 |
| | November | 42.8 | 12.0 | 45,588 | 939 | 264 |
| | December | 54.0 | 14.6 | 57,403 | 941 | 254 |
| **2001** | January | 41.0 | 11.1 | 53,691 | 764 | 206 |
| | February | 38.6 | 10.0 | 44,884 | 861 | 223 |
| | March | 26.3 | 6.8 | 34,729 | 757 | 196 |
| | April | 33.6 | 8.7 | 42,351 | 793 | 206 |
| | May | 37.5 | 9.7 | 50,159 | 747 | 193 |
| | June | 44.5 | 11.5 | 59,363 | 750 | 194 |
| | July | 84.8 | 21.9 | 109,005 | 778 | 201 |
| | August | 68.4 | 17.5 | 85,770 | 798 | 204 |
| | September | 78.1 | 18.7 | 101,965 | 765 | 184 |
| | October | 25.4 | 6.1 | 31,449 | 807 | 194 |
| | November | 32.7 | 7.9 | 40,014 | 817 | 196 |

Source: CAPMAS.

Notes: 1) Calculated unit values for some months appear to be exceptionally low (October 1999) or exceptionally high (December 1998).

2) These unit values are for the predominant traded category, “rice, whether polished or not.” “Rice, brokens”, “rice, husked” and “rice, paddy” are relatively minor traded rice categories which are not included in the aggregate volume or value data presented above. The unit value calculations are therefore for ““rice, whether polished or not” only. If data for the minor exported rice categories were included in the aggregate value and volume figures, the calculated unit values would be marginally lower, as the minor types of rice are worth less.

As in the first *Rice Subsector Baseline Update*, MVE adjusts the MALR yield estimates downward by 10%, estimates paddy losses at 10%, and estimates milled rice losses at 5%. After these adjustments, aggregate domestic rice consumption may be too low. Year-end stocks appear to be too high–over 900,000 of milled rice equivalent from 1994/95 through 1997/98. It does not make sense that producers would hold large paddy stocks year after year, without making significant (downward) production adjustments. It may be that domestic consumption is under-estimated during these years, which would lower year-end stocks.[17] Note that the MVE supply use table shows projected ending stocks in 2000/01 as 714,400 mt of milled rice equivalent, or about 1.1 mmt of paddy. Most GOE and industry participants did not expect year-end stocks to be that high; estimates clustered in the 150,000-400,000 mt range.[18]

Note that MVE's figures for estimated paddy area cultivated are higher than the MALR figures for 1999/2000 and 2000/01. MVE's estimate of area is 1.78 million feddans for 1999/2000, based on a set of consistency checks of agricultural area and production data in Egypt and in the seven rice-growing governorates (see Annex 3 of the *Rice Subsector Baseline Update*, Jan. 2000, and Chapter 2, p. 2). MVE uses the MIWR estimate for area planted to paddy in summer 2000, 2.017 million feddans. As in the earlier *Update*, MALR yields are adjusted downward by 10% to arrive at estimates of total paddy supply and carryover stocks from one year to the next that are more internally consistent with known and estimated use data. Despite these adjustments and caveats, the supply use data in Table 3-1 are illustrative and should be treated with caution. Neither the MALR nor the rice industry have any systematic or scientific estimates of carryover stocks or of stocks at any particular point in the marketing season.

Without solid, empirically based information, commodity supply and use exercises are rough approximations of reality. The estimates we present are a useful heuristic exercise, but they can certainly be improved upon. A first step in the improvement process should be strengthening MALR area and yield estimates. Periodic surveys of rice producers and traders could also be valuable in gaining a better understanding of their storage practices and quantities of paddy in storage at particular points during the rice marketing season.

### 3.5 Analysis of Seasonal Price Changes in 1999/00 and 2000/01

As discussed at length in the *Rice Subsector Baseline*, GOE price data do not generally show a very pronounced seasonal pattern for storable commodities such as rice. This lack of apparent seasonality is counter-intuitive and does not follow what has been observed in many other countries. The careful analyst is drawn to the conclusion that official price data are not very reliable, perhaps collected from

---

[17] A senior Egyptian rice researcher thinks that rural consumption adjusts from year to year as a function of the size of the rice crop. In years of scarcity, farmers eat less rice. In years of plenty, they eat lots of it. Hence, any straight-line projection of per capita or aggregate domestic rice consumption is flawed; consumption swings around a gentle upward trend line quite a bit from year to year.

[18] In 2000/01, it was alleged that producers fed a lot of paddy to livestock. Use of paddy as feed is not captured in the supply and use table. If properly accounted for, feed use would lower year end stocks for 2000/01. Human consumption may also have been higher than the assumed 45.0 kg./capita.

limited samples or by word-of-mouth and not through site visits. The most reliable monthly price data are collected by the MSHT, which obtains minimum and maximum wholesale and retail prices in Cairo and Alexandria (unpublished) and in a number of governorates.[19] CAPMAS used to collect bi-monthly rice prices in 17 rural governorates (see Table 4-3, p. 29 in the *Rice Subsector Baseline Update*, January 2000), but this series appears to have been discontinued after the end of 1999.

MSHT continues to collect, but not report, average minimum and maximum wholesale and retail prices for white rice each month in most governorates. Table 3-5 shows these prices for the period January 1996 through May 2001 for four key urban governorates, and Figure 3-4 plots average wholesale prices for Cairo and Alexandria.[20] An examination of the prices in the table suggests that the MSHT prices are approximations (they are usually round numbers), which are probably not collected from a scientific and random sample. Figure 3-4 shows a general downward trend in wholesale prices over the period of examination. Wholesale and retail prices were indeed highest (in nominal terms) in 1996/97 and lowest in 2000/01.

Note, however, that by November-December 2001, rice prices had increased, due to a combination of factors. First, the size of the 2001 summer paddy crop was probably smaller than announced by the MALR and expected by traders and millers. Second, there was some speculation in October-November 2001 that the GOE would subsidize rice exports again in 2001/02. This, along with the emerging perception of a rather short rice crop in 2001, led paddy traders to buy up large quantities of available stocks in anticipation of implicit price supports or a strong seasonal increase in prices. Third, it has been alleged (and suggested in newspaper articles) that paddy traders were holding paddy stocks in order to contrive scarcities and push up prices.

[19] Even this price series (see Table 3-5) has reported values that are round numbers and that (suspiciously) stay constant for months before changing.

[20] The average price is the average of the maximum and minimum price for the month.

## Table 3-5: Minimum and Maximum Wholesale and Retail Rice Prices for Four Urban Governorates

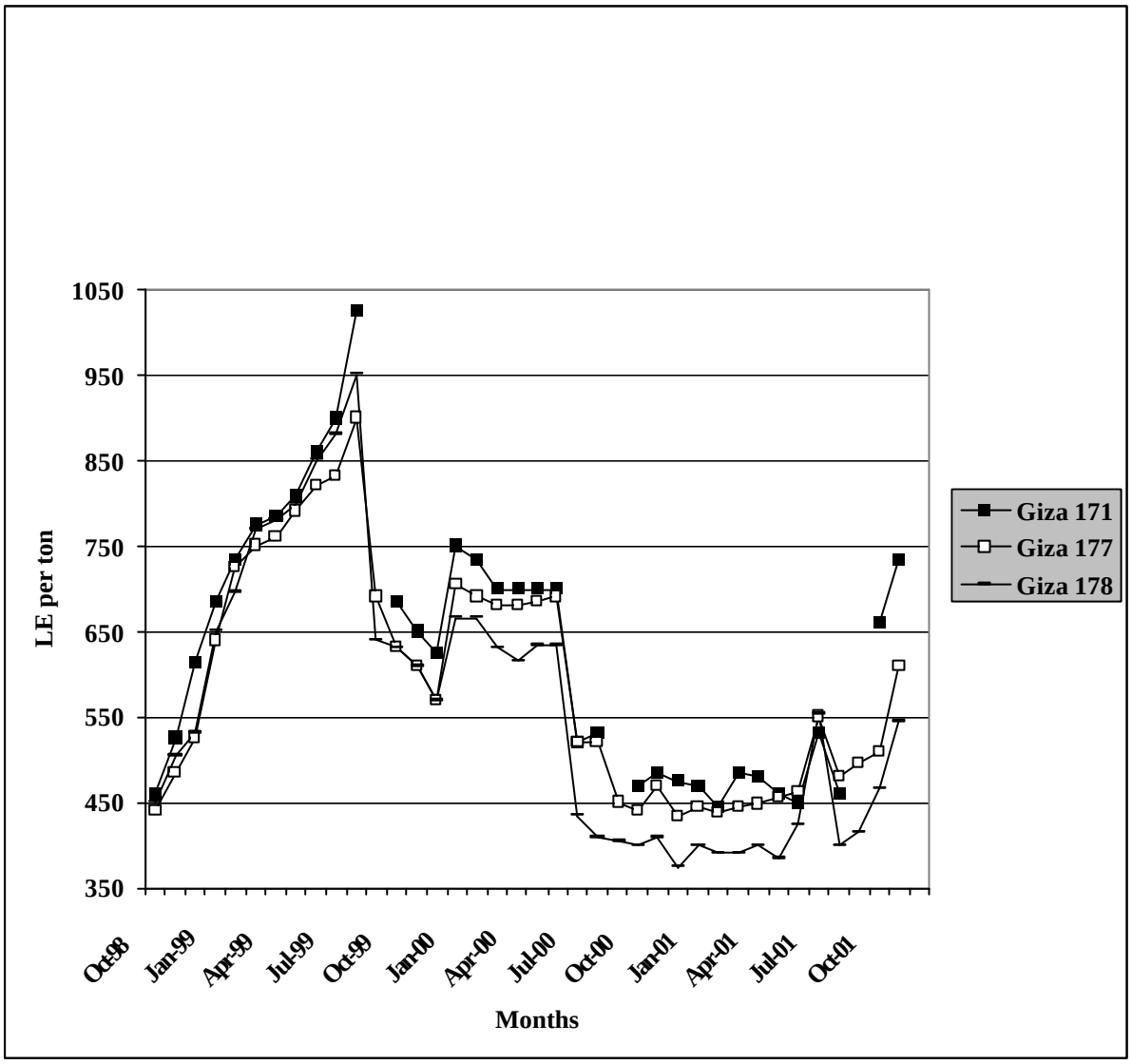
LE/kg

| Month | Cairo | | | | Giza | | | | Alexandria | | | | Qalubeya | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Wholesale | | Consumer | | Wholesale | | Consumer | | Wholesale | | Consumer | | Wholesale | | Consumer | |
| | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High |
| Jan. 96 | | | | | | | | | | | | | 110 | 115 | 130 | 130 |
| Feb. 96 | | | | | | | | | | | | | 110 | 115 | 130 | 135 |
| Mar. 96 | | | | | | | | | | | | | 110 | 110 | 130 | 130 |
| Apr. 96 | | | | | | | | | | | | | 110 | 115 | 130 | 130 |
| May 96 | | | | | | | | | 110 | 115 | 135 | 135 | 110 | 110 | 135 | 135 |
| June 96 | 115 | 115 | 120 | 160 | | | | | | | | | 120 | 125 | 140 | 140 |
| July 96 | 120 | 120 | 135 | 180 | | | | | | | | | 130 | 130 | 150 | 150 |
| Aug. 96 | 115 | 140 | 140 | 180 | | | | | 130 | 130 | 150 | 150 | | | | |
| Sep. 96 | 115 | 140 | 140 | 180 | | | | | | | | | 130 | 130 | 150 | 150 |
| Oct. 96 | 110 | 140 | 140 | 180 | 125 | 125 | 150 | 150 | | | | | 130 | 130 | 150 | 150 |
| Nov. 96 | 110 | 140 | 140 | 180 | 125 | 125 | 140 | 160 | 110 | 120 | 130 | 140 | 125 | 125 | 140 | 140 |
| Dec. 96 | 110 | 150 | 140 | 180 | 130 | 130 | 140 | 140 | 110 | 120 | 130 | 140 | 125 | 125 | 140 | 140 |
| Jan. 97 | 110 | 150 | 140 | 180 | 125 | 135 | 140 | 160 | 110 | 120 | 130 | 140 | 125 | 125 | 140 | 140 |
| Feb. 97 | 110 | 150 | 140 | 180 | 130 | 140 | 140 | 150 | 110 | 130 | 130 | 160 | 125 | 125 | 140 | 140 |
| Mar. 97 | 120 | 160 | 140 | 180 | 125 | 125 | 140 | 170 | 110 | 130 | 130 | 160 | 125 | 125 | 140 | 140 |
| Apr. 97 | 120 | 130 | 140 | 180 | | | 150 | 150 | 110 | 110 | 130 | 160 | 125 | 125 | 130 | 140 |
| May 97 | 120 | 120 | 140 | 180 | | | 150 | 150 | 110 | 115 | 130 | 175 | 125 | 125 | 140 | 140 |
| June 97 | 120 | 140 | 140 | 180 | | | 150 | 150 | 120 | 140 | 140 | 160 | 125 | 125 | 140 | 140 |
| July 97 | 120 | 160 | 140 | 180 | | | | | 110 | 120 | 130 | 140 | 125 | 125 | 140 | 140 |
| Aug. 97 | 120 | 120 | 140 | 180 | | | | | 110 | 135 | 125 | 150 | 130 | 130 | 140 | 140 |
| Sep. 97 | 120 | 160 | 140 | 180 | | | | | 110 | 135 | 125 | 150 | 110 | 110 | 140 | 140 |
| Oct. 97 | 120 | 160 | 140 | 180 | | | | | 100 | 130 | 110 | 140 | 110 | 110 | 140 | 140 |
| Nov. 97 | 120 | 160 | 140 | 180 | | | | | 110 | 130 | 130 | 140 | 100 | 100 | 120 | 120 |
| Dec. 97 | 120 | 160 | 140 | 180 | 130 | 140 | 150 | 170 | 100 | 130 | 110 | 140 | 110 | 110 | 130 | 130 |
| Jan. 98 | 120 | 160 | 140 | 180 | | | | | 100 | 130 | 110 | 140 | 110 | 110 | 125 | 125 |
| Feb. 98 | 120 | 160 | 140 | 180 | | | | | 100 | 130 | 110 | 140 | 120 | 120 | 140 | 140 |
| Mar. 98 | 110 | 160 | 130 | 180 | | | | | 100 | 110 | 125 | 140 | 125 | 125 | 140 | 140 |
| Apr. 98 | 110 | 130 | 120 | 140 | 110 | 110 | 130 | 170 | 100 | 110 | 125 | 140 | 110 | 110 | 140 | 140 |
| May 98 | 110 | 160 | 130 | 170 | | | 130 | 170 | 90 | 100 | 110 | 130 | 105 | 105 | 120 | 120 |
| June 98 | 110 | 160 | 130 | 170 | | | 160 | 160 | 90 | 115 | 110 | 130 | 110 | 110 | 130 | 130 |
| July 98 | 100 | 100 | 110 | 170 | | | 160 | 160 | 90 | 100 | 110 | 130 | 110 | 110 | 130 | 130 |
| Aug. 98 | 100 | 150 | 110 | 170 | | | 160 | 160 | 90 | 100 | 100 | 130 | 110 | 110 | 130 | 130 |
| Sep. 98 | 100 | 150 | 110 | 170 | | | 160 | 160 | 90 | 100 | 100 | 130 | 100 | 100 | 110 | 110 |
| Oct. 98 | | | | | | | | | 90 | 120 | 100 | 130 | | | | |
| Nov. 98 | 80 | 130 | 100 | 140 | | | 100 | 100 | 120 | 120 | 140 | 140 | 90 | 90 | 110 | 110 |
| Des. 98 | 80 | 110 | 100 | 135 | | | 100 | 150 | 80 | 110 | 100 | 130 | 90 | 90 | 110 | 110 |
| Jan. 99 | 80 | 110 | 100 | 135 | | | 100 | 150 | 100 | 115 | 120 | 130 | 90 | 90 | 110 | 110 |
| Feb. 99 | 80 | 110 | 100 | 135 | | | 100 | 150 | 120 | 140 | 150 | 175 | 110 | 110 | 130 | 130 |
| Mar. 99 | 90 | 130 | 110 | 150 | | | 100 | 150 | 100 | 115 | 120 | 130 | 115 | 115 | 130 | 130 |
| Apr. 99 | 100 | 140 | 120 | 170 | | | 100 | 150 | 100 | 115 | 120 | 130 | 120 | 120 | 130 | 130 |
| May 99 | 120 | 160 | 130 | 170 | | | 130 | 160 | 110 | 155 | 160 | 170 | 150 | 150 | 170 | 170 |

| Month | Cairo | | | | Giza | | | | Alexandria | | | | Qalubeya | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Wholesale | | Consumer | | Wholesale | | Consumer | | Wholesale | | Consumer | | Wholesale | | Consumer | |
| | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High |
| June 99 | 135 | 160 | 150 | 180 | | | 130 | 160 | 120 | 155 | 150 | 160 | 145 | 145 | 160 | 160 |
| July 99 | 140 | 165 | 150 | 180 | | | 150 | 170 | 100 | 145 | 160 | 170 | 150 | 150 | 160 | 160 |
| Aug. 99 | | | | | | | | | | | | | | | | |
| Sep. 99 | 130 | | 145 | | | | 110 | 190 | 90 | 110 | 120 | 140 | 110 | 110 | 120 | 120 |
| Oct. 99 | 110 | 125 | 125 | 140 | | | 120 | 120 | 80 | 90 | 110 | 120 | 110 | 110 | 120 | 120 |
| Nov. 99 | 105 | 115 | 110 | 125 | | | 120 | 125 | 80 | 90 | 120 | 140 | 110 | 110 | 120 | 120 |
| Dec. 99 | 105 | 115 | 110 | 125 | | | 120 | 125 | 80 | 90 | 120 | 140 | 110 | 110 | 120 | 120 |
| Jan. 00 | 100 | 110 | 110 | 120 | | | 130 | 130 | 90 | 110 | 110 | 140 | 100 | 100 | 110 | 110 |
| Feb. 00 | 100 | 110 | 110 | 120 | | | 110 | 110 | 90 | 110 | 110 | 140 | 100 | 100 | 120 | 120 |
| Mar. 00 | 100 | 110 | 110 | 120 | | | 125 | 125 | 90 | 110 | 110 | 140 | 110 | 110 | 110 | 110 |
| Apr. 00 | 100 | 110 | 110 | 120 | | | 125 | 125 | 90 | 110 | 110 | 140 | 100 | 110 | 110 | 110 |
| May 00 | 100 | 110 | 120 | 130 | | | 125 | 135 | 90 | 110 | 110 | 140 | 100 | 110 | 110 | 110 |
| June 00 | 100 | 110 | 120 | 140 | | | 125 | 125 | 100 | 110 | 125 | 140 | 110 | 110 | 120 | 120 |
| July 00 | 100 | 110 | 115 | 125 | | | 120 | 120 | 100 | 110 | 125 | 140 | 100 | 100 | 110 | 110 |
| Aug. 00 | 100 | 110 | 115 | 125 | | | 120 | 120 | 100 | 110 | 125 | 140 | 80 | 80 | 100 | 100 |
| Sep. 00 | 90 | 100 | 100 | 110 | | | 120 | 120 | 80 | 100 | 100 | 130 | 85 | 85 | 100 | 100 |
| Oct. 00 | 70 | 80 | 100 | 110 | | | 120 | 120 | 80 | 100 | 100 | 130 | 80 | 80 | 90 | 90 |
| Nov. 00 | 90 | 100 | 110 | 120 | | | 110 | 115 | 70 | 80 | 90 | 100 | 80 | 80 | 90 | 90 |
| Dec. 00 | 90 | 100 | 110 | 120 | | | 100 | 100 | 70 | 80 | 90 | 100 | 75 | 75 | 85 | 85 |
| Jan. 01 | 80 | 90 | 90 | 110 | | | 100 | 100 | 80 | 90 | 100 | 120 | 90 | 90 | 100 | 100 |
| Feb. 01 | 90 | 100 | 110 | 120 | | | 100 | 100 | 80 | 90 | 100 | 120 | 90 | 90 | 100 | 100 |
| Mar. 01 | 80 | 90 | 90 | 100 | | | 105 | 105 | 55 | 80 | 80 | 100 | 90 | 90 | 100 | 100 |
| Apr. 01 | 70 | 80 | 90 | 100 | | | 105 | 105 | 55 | 80 | 80 | 100 | 90 | 90 | 100 | 100 |
| May 01 | 80 | 90 | 100 | 120 | | | 100 | 100 | 55 | 80 | 85 | 100 | 80 | 90 | 90 | 90 |
| June 01 | 100 | 110 | 110 | 130 | | | 100 | 100 | 55 | 80 | 90 | 100 | 80 | 80 | 90 | 90 |
| July 01 | 80 | 90 | 100 | 120 | | | 100 | 100 | 55 | 80 | 90 | 100 | 90 | 90 | 100 | 100 |
| Aug. 01 | 80 | 90 | 100 | 120 | | | 100 | 100 | 55 | 80 | 90 | 100 | 90 | 90 | 110 | 110 |
| Sep. 01 | 80 | 90 | 90 | 100 | | | 100 | 100 | 70 | 90 | 100 | 110 | 100 | 100 | 110 | 100 |
| Oct. 01 | 80 | 90 | 100 | 110 | | | 110 | 110 | 70 | 90 | 100 | 110 | 80 | 80 | 90 | 90 |
| Nov. 01 | 110 | 130 | 140 | 160 | | | 110 | 110 | 110 | 120 | 130 | 140 | 100 | 100 | 110 | 110 |
| Dec. 01 | 110 | 130 | 140 | 160 | | | 130 | 135 | 110 | 120 | 130 | 140 | 125 | 125 | 135 | 135 |

Source : MSHT, "Cereals and Legumes Department"

**Figure 3-1: Into-Mill Wholesale Paddy Prices for Three Major Traded Varieties, Oct. 1998 - Dec. 2001**




Source: Table 3-2

# 4. RICE EXPORT MARKETING

## 4.1 Introduction and Data Sources

Egypt's performance as a rice exporter from the 1980s through 1997/98 is described in detail in the *Rice Subsector Baseline Study* (March, 1999). The *Rice Subsector Baseline Update* (January, 2000) presents a detailed assessment of the 1998/99 marketing season and the first five months of the 1999/2000 season. This section will present a final assessment of the 1999/2000 export marketing season and an analysis of the 2000/01 season.

The most reliable source of rice export data in Egypt is the MFT/GOEIC, which reports rice export volume (only) by country of shipment or destination and by shipper for the export marketing year—October 1 of one year (e.g., 2000) to September 30 of the following year (e.g., 2001). These data are assembled by GOEIC from their own records, as GOEIC coordinates inspections on all imports and exports and must give its approval for exporters to ship. GOEIC also periodically tabulates exports by rice type, breaking exports into five types: *camolino*, natural, cargo (or brown, semi-processed rice), 100% brokens and paddy. There are 5-6 grades of *camolino* and natural milled rice.

GOEIC prepares 4-5 pages of rice export statistics at somewhat unpredictable intervals. During some periods, GOEIC prepares a monthly report; during other periods, tabulations seem to be done bi-weekly. GOEIC faxes its report to a short list of key rice exporters and millers, public officials in MFT and MALR, and Holding Company officials. It is not made available to the general public. APRP's MVE Unit has had a difficult time obtaining this data on a regular basis. This has also proven to be a problem for the RDI Unit, which has been developing a web site for cotton and rice at www.agpolicy.com, which will be turned over to a public agency (most likely the Egyptian Export Promotion Center) or the ACC Rice Subcommittee once development is completed. Without regular and timely access to rice export data, a rice marketing information system will be flawed.

We also present some CAPMAS data on rice export quantities, total values, and unit values by country of shipment or destination for 1997/98 to 2000/01. CAPMAS data come from Customs records. The CAPMAS reporting year (January-December) is the calendar year, which does not correspond with how the export volume data are reported by MSHT/GOEIC. CAPMAS does assemble and can make available, for a fee, aggregate monthly rice export volume and value data (in both LE and $), from which monthly unit values can be calculated. These unit values are useful as indicative prices, but they are averages across the five types of rice noted above (and the multiple grades within *camolino* and natural). Since the CAPMAS export data are assembled by month, CAPMAS and GOEIC export figures can be compared, though they do not match exactly (see Table 4-1).[21]

[21] Based on his own research using Egyptian trade statistics, Mohamed Omran of USAID/Cairo (personal communication) concludes that GOEIC data are accurate for export volumes and that CAPMAS data are subject to some (exporter) reporting lags.

## 4.2 1999/2000 Marketing Season

Rice exports increased 9.6% from 1998/99 to 1999/00, although exports in 1999/00 trailed those in 1998/99 for most of the export marketing season (through July, as shown in Table 4-2).

**Table 4-1: Rice Export Volume and Value, 1995/96 to 2000/01**

| | Using GOEIC Data | | | | Using CAPMAS Data | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | GOEIC | Index | Total Value | Index | CAPMAS | Index | Total Value | Index | Unit Value | Index |
| | mt | % | mill. $ | % | mt | % | mill. $ | % | $/mt | % |
| 1995/96 | 355,230 | | 124.7 | | 324,869 | | 114.1 | | 351 | |
| 1996/97 | 166,163 | 100 | 61.8 | 100 | 166,032 | 100 | 61.8 | 100 | 372 | 100 |
| 1997/98 | 409,118 | 246 | 130.1 | 209 | 350,986 | 211 | 111.6 | 181 | 318 | 85 |
| 1998/99 | 308,221 | 185 | 92.9 | 149 | 356,771 | 215 | 107.5 | 174 | 301 | 80 |
| 1999/00 | 337,916 | 203 | 101.0 | 164 | 328,792 | 198 | 98.3 | 159 | 299 | 81 |
| 2000/01 | 755,434 | 455 | 158.8 | 263 | 741,188 | 446 | 155.8 | 254 | 210 | 57 |

Sources: The APRP, MVE Unit prepared this table from multiple sources. 1) GOEIC reports only export quantities. The unit export values are calculated from CAPMAS data on total export value.
2) CAPMAS tabulates export volume and total export value in both LE and U.S. dollars.

Notes: 1) Data are reported for market years, October of one year through September of the next.
2) The value of exports is based on monthly CAPMAS data. GOEIC export volumes are multiplied by CAPMAS unit values to arrive at total value of exports (under "Using GOEIC Data").
3) The value per mt is a calculated unit value, calculated across all types/grades of rice. It is not a consistent time-series for one representative, widely traded rice type, such as *camolino* grade 2.
4) The choice of base year (1996/97) for calculating index values coincides with the beginning of APRP. Use of 1995/96, when exports and export revenues were much higher, as a base year would lower the index values.

As of the end of March, 1999/00 exports of 172,534 mt trailed 1998/99 exports of 258,318 by over 85,000 mt. Exports in 1999/00 ended strongly, however, with 165,362 mt (48.9% of total exports) being shipped from April through mid-October 2000. Note that strong second half export performance is not unusual, however. Exports during the second half of the marketing season exceeded first half exports in both 1997/98 (55.2% of the total after 4 April) and 2000/01, two very strong export years.

Export figures by export destination are the only breakdown available from MFT/GOEIC for the October 1999 through September 2000 marketing season. No breakdown of exports by Egyptian shipper seems to have been produced after 15 January 2000.[22]

[22] A number of exporters objected to publication of exports by exporting company, so later tabulations were not reported that particular marketing year. The breakdowns by shipper reappeared in 2000/01 and have been tabulated and "published" ever since then.

**Table 4-2: Cumulative Rice Exports at Different Points in the Marketing Season, 1997/98 to 2000/01**

| Date | 2000/01 | 1999/2000 | 1998/99 | 1997/98 |
|---|---|---|---|---|
| 30-Nov | 87,418 | 40,636 | 25,940 | |
| 05-Jan | 135,504 | 124,938 | 157,158 | 98,476 |
| 30-Jan | | 132,640 | 189,747 | 124,131 |
| 28-Feb | 237,705 | 147,712 | 215,256 | 138,911 |
| 17-Mar | 253,747 | 173,405 | 236,354 | 160,982 |
| 04-Apr | 270,458 | 173,405 | 258,318 | 183,188 |
| 15-Apr | 298,995 | 178,002 | 260,318 | |
| 26-Apr | 307,498 | 212,433 | 278,935 | |
| 02-May | 314,291 | 212,433 | 278,935 | 211,901 |
| 20-May | 338,068 | 219,068 | 283,353 | 249,247 |
| 02-Jul | 417,289 | 274,231 | 288,163 | 261,126 |
| 30-Jul | 536,789 | 284,020 | 301,201 | 321,878 |
| 20-Aug | 594,786 | 295,293 | 294,784 | |
| 10-Sep | | | | 366,421 |
| 15-Oct | 755,434 | 337,896 | 308,221 | 409,117 |

Source: GOEIC, MFT, Alexandria

Notes: 1) This table shows cumulative month by month exports.

2) 30-July exports for 1999/00 are through 22-July-2000.

### 4.2.1 Exports by Destination

As shown in Table 4-3, the country breakdown of exports in 1999/00 differed in some significant ways from 1998/99. The most significant shift was in exports to Libya, which imported 48,007 mt of Egyptian rice in 1999/00 in government-to-government deals. The FIHC negotiated these exports on behalf of public and ESA rice milling companies. Not since 1991/92, when Libya imported 43,040 mt of Egyptian rice, had Libya been such an important market. Another important development was that Egyptian rice exports to Romania (mainly cargo) dropped 28.7% in 1999/00 to 37,331 mt from 52,380 mt in 1998/99 (which was a record level for Egypt before 2000/01). The main reason for this was that Romania imported large volumes of Chinese medium-grain rice (in the form of cargo), which was priced lower than Egyptian rice. Cargo is shipped to Romania, because the tariff on cargo is far lower than the tariff on imported milled (white) rice.

Changes in exports to other countries were less marked. Rice exports remained at almost exactly the same level for Turkey, though as a proportion of total exports, shipments to Turkey declined from 21.7% to 19.7%. Exports to Syria expanded 27.4% to 74,091 mt, making Syria the number one destination for Egyptian rice in 1999/00 (21.9% of total exports). Although exports to Jordan and Lebanon fell in 1999/00 relative to 1998/99, overall exports to Arab 1, which includes the four traditional Mediterranean Arab markets (Syria, Jordan, Lebanon, Palestine), increased to 101,137 mt (30.4% of total exports). Exports to other African countries expanded by over

**Table 4-3: Egyptian Rice Exports by Country of Destination, 1995/96 to 2000/01**

(mt)

| Country | 1993/94 | 1994/95 | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 |
|---|---|---|---|---|---|---|---|---|
| Turkey | 72,514 | 19,739 | 42,751 | 17,307 | 117,868 | 66,899 | 66,408 | 112,949 |
| Arab 1 | | | | | | | | |
| Syria | 101,361 | 48,428 | 55,874 | 36,855 | 83,483 | 58,161 | 74,091 | 159,559 |
| Jordan | 30 | 1,950 | 61,500 | 8,375 | 28,091 | 19,735 | 14,495 | 24,312 |
| Lebanon | 14,901 | 7,173 | 9,926 | 7,924 | 9,704 | 13,391 | 9,743 | 14,594 |
| Palestine | | | 5,180 | 4,125 | 2,934 | 2,274 | 2,808 | 8,007 |
| Total Arab 1 | 116,292 | 57,551 | 132,480 | 57,279 | 124,212 | 93,561 | 101,137 | 206,472 |
| Arab 2 | | | | | | | | |
| Libya | 7,310 | 22,000 | 21,400 | | 15,000 | | 48,007 | 73,052 |
| Saudi Arabia | 3,131 | 3,761 | 5,150 | 2,001 | 1,637 | 1,051 | 6,382 | 6,034 |
| UAE | 886 | 1,688 | 1,320 | 3,597 | 3,583 | 4,017 | 5,313 | 5,432 |
| Kuwait | | | 794 | 408 | 1,400 | 622 | 1,282 | 3,416 |
| Iraq | | | | | 5,000 | | | 88 |
| Other Arab 2 | | | | | | | | 501 |
| Total Arab 2 | 11,327 | 27,449 | 28,664 | 6,006 | 26,620 | 5,690 | 60,984 | 88,523 |
| NIS/EE | | | | | | | | |
| Russia | | | 12,179 | 5,917 | 7,797 | 419 | 538 | 16,310 |
| Albania | 1,850 | 150 | 11,595 | 3,960 | 9,884 | 12,651 | 5,600 | 9,302 |
| Romania | | 5,970 | 49,199 | 37,098 | 49,321 | 52,380 | 37,331 | 84,221 |
| Bulgaria | | | 17,931 | 10,637 | 8,145 | 10,266 | 5,735 | 10,627 |
| Ukraine | | | 8,087 | 9,361 | 22,244 | 6,721 | 3,478 | 37,703 |
| Uzbekistan | | | 6,150 | 1,384 | | | | 60 |
| Macedonia | 5,000 | | 1,000 | | | | | 0 |
| Yugoslavia | | | 534 | 1,662 | 875 | 54 | | 43 |
| Hungary | | | | 1,000 | 632 | 3,570 | | 732 |
| Czech./Slovenia | | | | | 1,950 | 412 | | 1,972 |
| Georgia | | | | | 2,651 | | | 0 |
| Moldova | | | | | 43 | 150 | | 475 |
| Other NIS/EE | | | | | | | | 993 |
| Total NIS/EE | 6,850 | 6,120 | 106,675 | 71,019 | 103,541 | 86,623 | 52,682 | 162,437 |
| W. Europe | | | | | | | | |
| Spain | 13,410 | | 8,201 | 375 | 7,994 | 2,187 | 148 | 3,905 |
| Switzerland | | | 6,200 | | | | | |
| Greece/Cyprus | 3,143 | 1,844 | 2,810 | 393 | 1,858 | 2,813 | 1,578 | 10,769 |
| Germany | 1,530 | | | | | 743 | 1,188 | 253 |
| Italy | 3,430 | | | 100 | 100 | 1,638 | 619 | 487 |
| Netherlands | | | | | | 315 | 669 | 2,879 |
| England | | | | | | | | 12,378 |
| Other WE | | | | 247 | 400 | | | 11,104 |
| Total WE | 21,513 | 1,844 | 17,211 | 1,115 | 10,352 | 7,696 | 4,202 | 41,775 |
| Africa | | | | | | | | |

| Country | 1993/94 | 1994/95 | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 |
|---|---|---|---|---|---|---|---|---|
| Sudan | 13,606 | 9,423 | 20,943 | 13,184 | 19,831 | 16,178 | 36,503 | 35,418 |
| Tunisia | 3,250 | | | | | | | 0 |
| Morocco | | | | 100 | | 220 | | 590 |
| Cote d'Ivoire | | | | | 4,501 | | 106 | 19,360 |
| Senegal | | | | | | 3,300 | | 14,555 |
| Kenya | | | | | | 15,575 | 11,565 | 12,524 |
| Tanzania | | | | | | | | 18,282 |
| Other Afr. | | | | | | 4,000 | | 40,465 |
| Total Africa | 16,856 | 9,423 | 20,943 | 13,284 | 24,332 | 39,273 | 48,174 | 141,193 |
| Asia | | | | | | | | |
| Japan | | | | 153 | 153 | | 107 | 0.01 |
| Total Asia | | | | 153 | 153 | | 107 | 132 |
| Others | | | | | | | | |
| Israel | 4,431 | 3,057 | 1,356 | | 714 | 651 | | 3,214 |
| Others | 1,961 | 2,652 | 5,149 | | 400 | 7,830 | | 79 |
| Total Others | 6,392 | 5,709 | 6,505 | 0 | 1,114 | 8,481 | 0 | 3,293 |
| Grand Total | 251,744 | 127,835 | 355,229 | 166,163 | 408,193 | 308,223 | 333,694 | 756,774 |

Source: GOEIC, Ministry of Foreign Trade

Notes: 1) For the year 1996/97, Romania's export figures include Hungary, and others' export figures include Morocco and Italy.

2) It appears as if some countries' exports are reported in "Others" when volume is below 1,000 tons.

3) Exports to other African countries for 1998/99 include 4,000 mt to South Africa.

4) The grand total for exports by country exceeds the reported total of exports by shipper for 2000/01. The source of this discrepancy (1,340 mt) is unclear.

5) In 2000/01, Sierra Leone imported 15,402 mt. Other African countries importing that year were Guinea (17,153 mt), Congo (3,060 mt) and South Africa (18 mt).

13,000 mt to 52,376 mt, a record level prior to 2000/01, mainly on the strength of increased exports to Sudan (from 16,178 mt to 36,503 mt, also a record).

### 4.2.2 Export Market Shares by Company

During the 1999/00 marketing season, GOEIC did not report export shipments by company after mid-January 2000, largely at the request of the exporters. No final breakdown is available, except for the private and public shares. The private share increased marginally to 92.1% from 89.1% in 1998/99. Based on interviews with most of the largest exporters, it appears as if the export shipments and market shares of the largest exporters were similar to earlier years, as shown in Table 4-4.

The largest private exporters in 1999/00 were El Fostat, Wakalex, Fresh Fruit, El Mabrouk, and Egyptian Traders[23], combining for an estimated 178,000 mt, or 58.2% of total private sector exports.

[23] Pharoan Milling Company exported more rice in 1999/00 than Egyptian Traders, but in all other years Egyptian Traders is among the five private exporters, so we retain this firm in that group of top five private exporting firms during the one year it was no. 6.

Comparable figures for 1998/99 were 169,906 mt or 61.9% of the private sector's share. The public sector Rice Marketing Company shipped relatively modest quantities both years, which would be surpassed by a wide margin in 2000/01, when it exported over 100,000 mt.

**Table 4-4: Market Shares for the Largest Private Exporters, 1999/2000**

| **Exporter** | **1999/2000** | | **1998/99** | |
|---|---|---|---|---|
| ***Private Exporters*** | **Est. Volume (in mt)** | **Approx. Share** | **Est. Volume (in mt)** | **Approx. Share** |
| Wakalex | 50,000 | 16.3% | 49,294 | 18.0% |
| El Fostat | 60,000 | 19.6% | 54,690 | 19.9% |
| Fresh Fruit | 25,000 | 8.2% | 12,298 | 4.5% |
| El Mabrouk | 30,000 | 9.8% | 27,205 | 9.9% |
| Egyptian Traders | 13,000 | 4.2% | 15,095 | 5.5% |
| *Top Five Private* | *178,000* | *58.2%* | *169,906* | *61.9%* |
| Pharaon | 17,300 | 5.7% | 11,325 | 4.1% |
| Geffco Rice Mill | 8,500 | 2.8% | 3,250 | 1.2% |
| **Total Private Share** | **305,923** | **92.1%** | **274,546** | **89.1%** |
| ***Public Exporters*** | | | | |
| Rice Marketing Co. | 4,300 | 16.3% | 15,080 | 44.8% |
| *Total Public Share* | *26,399* | *7.9%* | *33,676* | *10.9%* |

Sources: 1) GOEIC for 1998/99 and 1999/00 public/private breakdown only.
2) Interviews with rice exporters for 1999/00 (approximate figures).
Note: Private shares are for private exporters only (denominator is "total priv. share").

### 4.2.3 Egyptian Rice Exports by Type and Grade

GOEIC reported rice exports by type and grade through 2 July 2000, at which point 274,231 mt of rice had been shipped (81.2% of recorded exports for the entire 1999/2000 marketing season). As in 1998/99, 70% of Egyptian rice exports in 1999/2000 were as *camolino*, of which most–62% of total exports–was as *camolino*, grade 2. These proportions are marginally lower than 1998/99 exports of *camolino*, which reached 75.1% in total, of which 70.7% was *camolino*, grade 2. *Camolino*, which is natural white rice treated with paraffin oil, is the staple of the traditional Eastern Mediterranean markets (Arab 1 countries). Natural rice comprised 20% of exports to 2 July 2000, of which the largest portion (32,832 mt) was grade 1 shipped mainly to Libya. Cargo exports, destined primarily for Romania, had reached 22,378 mt by 2 July 2000, which was 53% greater than in 1998/99. In contrast, export shipments of 100% brokens had declined from 9,343 mt in 1998/99 to 3,225 mt as of 2 July 2000. Brokens are collected by exporters from numerous mills, consolidated, and shipped to lower-income countries in Sub-Saharan Africa, such as Senegal.

### 4.2.4 Rice Export Prices in 1999/2000

Egyptian rice export prices were quite high, given high early marketing season paddy procurement prices. Private millers and exporters were able to buy significant quantities of paddy after the RFM-HC and the public/ESA mills completed their purchases and exited the market in early December 1999, but into-mill wholesale paddy prices did not drop much until the summer of 2000. As noted above, exports in 1999/2000 were relatively low (132,640 mt or 39.3%) as of late January 2000, four months into the export marketing season. Exports during the next 8 months reached 205,265 mt (60.7%), with a substantial proportion (118,828 mt or 35.2%) coming after 20 May 2000. This end-of-the-season export push in 1999/2000 contrasted sharply with the 1998/99 experience, where exports as of 20 May 1999 were 90.5% of the total for 1998/99. The poor summer export performance in 1998/99 was due to domestic supply shortages which emerged in the Egyptian market beginning in the spring of 1999, leading to high paddy prices and milled rice price hikes in May-June, which stimulated several traders to import Chinese rice in July 1999. Several large commercial rice millers and private exporters reported losing money on rice export shipments made during the summer of 1999, but they preferred to maintain good relations with key customers rather than risk losing buyers because they failed to honor contracts.

In summer 2000 of the 1999/2000 marketing season, paddy prices collapsed as the large size of the 2000 paddy crop became obvious and large millers and exporters could expand export shipments, due to declining paddy input costs. Anticipation of the immense summer 2000 rice crop led wholesale traders to liquidate stocks at prices well below earlier season levels. This made Egyptian rice exports more competitive in contested markets, such as traditional Eastern Mediterranean markets and Black Sea markets. Hence, the 1999/2000 export marketing season ended on an upbeat note and total exports increased by nearly ten percent over 1998/99 exports, despite trailing them over much of the course of the 1999/2000 season. This strong closing performance, plus realization of a large 2000 paddy crop, led some GOE officials to predict that exports in 2000/01 might approach one million mt.

## 4.3 2000/01 Marketing Season

Egypt's experience of a large summer 2000 paddy crop, followed by depressed producer prices, was not atypical in 2000/01. Many producing countries had excellent harvests and sizeable rice surpluses, which they had to dispose, which combined to pull world rice prices down to their lowest levels in 15 years. In this world trade environment, Egyptian surplus rice destined for export had to compete with surpluses put on the market by other producing countries.

At the same time, the Egyptian pound began to depreciate steadily against the US dollar by the beginning of the 2000/01 marketing season. As paddy procurement prices, white and ex-mill rice prices became cheaper in dollar terms, exporters were able to offer Egyptian rice at lower FOB prices, nearly always denominated in U.S. dollars.

### 4.3.1 Exports by Destination

Exports through 30 September 2001 reached or approached record levels for many country destinations. Turkey had imported almost 113,000 mt of Egyptian rice, nearly 47,000 mt more than during each of the past two marketing years, although it did not surpass the record level of 117,868 mt, set in 1997/98. As shown in Table 4-2, Syria had imported nearly 160,000 mt of Egyptian rice by 30 September 2001, about 85,000 mt more than in 1999/00 and above the previous record of 101,361 mt of 1993/94. Libya had imported a record 73,000 mt of rice, 25,000 mt more than in 1999/00 and also a record high. Romania had also imported a record 84,000 mt of Egyptian rice as of 30 September 2001, nearly 30,000 mt greater than the previous record year of 1998/99.

The proportion of total exports shipped to each of these leading markets was actually lower than in 1999/00, however. The four largest customers–Syria, Turkey, Libya and Romania–took delivery on a combined 429,781 mt, representing 56.8% of total exports. This compares to 225,800 mt imported by these same big four customers in 1999/2000, which represented 66.8% of total exports. The reason for this proportional decline is that certain smaller markets greatly expanded imports of Egyptian rice over earlier years: Palestine (8,007 mt), Russia (16,310 mt), Ukraine (37,703 mt), Spain (3,905 mt), Greece/Cyprus (10,769 mt), the Netherlands (2,879 mt), other Western European destinations (11,104 vs. no more than 400 in any previous year), Tanzania (18,282 mt), and other African destinations (40,465 mt vs. none in 1999/00).

The largest group of importing countries was Arab 1 countries, including Syria, Jordan, Lebanon and Palestine, importing 206,472 mt or 27.3% of the total as of 30 September 2001. Next is the NIS/Eastern European countries, who had imported 162,437 mt (slightly below the levels of 1995/96 and 1997/98). African countries, including Sudan (a major importer at 35,418 mt) and several North African countries (who are minor importers), had imported a record 84,100 mt of Egyptian rice by 30 September 2001. This represented a record high 18.6% of total Egyptian rice exports. Exports to African destinations have increased steadily since 1996/97, with 52,376 mt being exported in 1999/2000. Across the board, it was a strong year for Egyptian rice exporters.

### 4.3.2 Factors Driving Diversification of Egyptian Rice Exports in 2000/01

Egyptian exporters shipped large volumes of rice to many destinations in 2000/01, including traditional markets, recently established markets, and new markets. Traditional markets took more Egyptian rice in 2000/01 than in recent years, because Egyptian rice, particularly preferred short grain varieties, was available and cheap. Rice export subsidies, quietly implemented after 23 January 2001, were an important factor in making Egyptian rice more competitive this marketing season in the face of stiff competition from other exporting countries, whose rice was priced at unusually low levels.

Rice exports to the NIS and Eastern European countries, markets that first became important to Egypt in 1995/96, more than doubled from 1999/00, a poor year, to 2000/01. Egyptian rice exports were undercut by cheaper Chinese medium-grain rice in these markets in 1999/00. Chinese rice was more expensive than Egyptian rice in 2000/01, especially after the rice export subsidy was implemented. Chinese rice also faced the disadvantage of being shipped long distances in very large volumes, generally at least 10,000 mt per shipment. Only a few importers are able to finance such large transactions and to distribute such large volumes in a timely (low-cost) manner. High storage and

interest charges on rice stored over long periods can be financially ruinous, particularly in smaller country markets with limited absorptive capacity.

Egyptian exporters have another advantage over more distant suppliers, such as the Chinese, Americans, and Australians, because they can ship smaller amounts than competitors, and they can ship more quickly and frequently. Only the largest rice importers in countries such as Turkey, Syria, Jordan, Bulgaria, Ukraine, Sudan and African countries wish to import 10,000 or more mt typically shipped by the more distant suppliers. Imports of this volume require large financial outlays (to buy the rice), as well as high storage costs. Imports of 10,000 to 15,000 mt into a small country market may take months to move out of storage. Smaller Egyptian shipments of 500-5,000 mt tie up an importer's scarce capital for shorter periods. This is an important consideration in countries where forex is scarce (e.g., Syria) or where the domestic currency has declined in value (e.g., Turkey), due to domestic financial crises. Egypt's proximity to Eastern Mediterranean, Black Sea, and East African markets provides a competitive advantage in that importers can import smaller quantities at different points during the marketing season, enabling them to adjust more readily to domestic market conditions. If an importer of a relatively small volume has trouble moving his imported rice onto his domestic market, he can delay importation of additional (Egyptian) rice until the stocks clear. In this way, he minimizes risk and avoids tying up too much capital in large rice stocks. Chinese and American exporters will only ship large volumes to distant markets, which can create problems with foreign importers: heavy finance requirements and large stocks that must be stored properly. Importing huge volumes at one time may also depress local rice prices and lower importers' returns to levels below what they anticipated.

Egyptian rice exporters shipped rice to new markets, mainly in Sub-Saharan Africa, in 2000/01. This is consistent with the GOE's strategic export promotion thrust into new markets, particularly COMESA countries, which do not charge customs duties on Egyptian rice imports. It has been driven, to a large extent however, by rice export subsidies on Giza 178, a variety that is not preferred by traditional customers in the Eastern Mediterranean and the Arab world. African importers buy on price, with quality being a very secondary consideration. Incomes and purchasing power are limited in African countries, so importers search out the cheapest supplies available. In most years, this is cheap Asian long-grain rice from Thailand, Vietnam, India or Pakistan. Typically, lower grades with higher proportions of brokens (15%, 25% or more) are imported, as low-income customers are unable to pay premiums for higher-grade rice.

As of 23 January 2001, Egyptian exporters received a subsidy of LE 200 on every ton of Giza 178 exported. This was equivalent to over $50 until 5 August 2001, when the pound was officially devalued to LE 4.15=$1.00. Exporters were able to offer most, if not all of this subsidy to foreign importers, underpricing competing exporters of long-grain rice in the process. This subsidy proved to be a major spur to new market development, but it appears as if the GOE will not be able to extend subsidy payments to the new export marketing season, 2001/02. Egypt captured significant market share in countries such as Tanzania and Kenya in 2000/01 by out-competing other suppliers on price grounds alone. MVE anticipates that these market shares could easily be lost to the shippers of long-grain Asian rice if Egyptian rice prices rise by more than the equivalent decline in the dollar value of the Egyptian pound and unless exporters continue to receive subsidies. Since long-grain rice prices remained low at the start of the 2001/02 export marketing season, the magnitude of such subsidies might have to be

quite large to maintain Egyptian market shares in highly price-sensitive African markets. These same points can also be made with respect to the NIS/Eastern European markets, which are price sensitive and imported Giza 178 rice in large volumes in 2000/01.

### 4.3.3 Export Market Shares by Shipper in 2000/01

As shown in Table 4-5, rice exports from 1995/96 to 1998/99 were moderately concentrated, with the top five exporters shipping slightly more than 50% of total exports during three of those four marketing seasons. The top two private exporters shipped more than a third of total exports during all four years (35.3% to 50.3%).

The private sector share of exports also was 87.5% or more of total exports during three of those four seasons, dipping to 78.2% in 1997/98 when public sector rice mills bought 517,600 mt of paddy. Note, however, that it is not uncommon for public or ESA rice milling companies to sell milled rice to private exporters (so the public share of total rice exports is not necessarily an accurate proxy for the public share of milling paddy).

Table 4-6 shows exporter market shares by volume shipped for five export marketing years. The breakdown for 2000/01 shows that there were many more participants in 2000/01 than in previous years. Fifty-five private exporters shipped at least 1,000 mt in 2000/01, while 50 exporters shipped over 1,000 mt in 1998/99 and 52 in 1997/98. The total number of exporters who had shipped rice in 2000/01 is estimated at 115, compared to 99 in 1997/98 and 75 in 1996/97.[24] Clearly, participation has gradually expanded, though it should be noted that the high levels of participation in 2000/01 may be largely a function of the record marketed surplus. Many smaller exporters could drop out of export market in 2001/02 if exports are 50% or less of the 2000/01 record level.

Higher levels of participation in 2000/01 lowered the concentration ratio for the top five private firms from over 50% during the 1996/97 to 1998/99 period to 35.6%, with the top two private firms capturing only 18% of the export market. Both ratios were the lowest over the entire period during which private traders have been allowed to export and for which statistics are available (since 1991/92). Note, however, that one public company, the Rice Marketing Company, captured the largest export share in 2000/01, 13.3% on 100,665 mt of exports of rice milled by public and ESA rice mills, shipped predominately to Libya and Syria. This company may become an ESA firm, however, though with the FIHC holding majority shares in the medium-term, it will continue to be managed and operate like a public sector company, serving the ESA rice mills. On the strength of the Rice Marketing Company's exports, the public share of rice exports was 14.7% in 2000/01, last surpassed by the public share (21.8%) in 1997/98.

[24] The number of exporters is not known exactly. GOEIC reports data for all the public sector exporters and those private sector exporters with shipments greater than a certain amount (e.g., 1000 mt per shipper). Private exporters with shipments below a certain amount are not reported separately, so their numbers are estimated by assuming an average shipment size for the lowest volume shippers, whose total export volume is reported as an aggregate.

Note, however, that the exports of the seven public exporters (four ESA mills and three public trading companies) other than the Rice Marketing Company were only 10,707 mt. As long as FIHC manages the ESA mills and the Rice Marketing Company, the public sector will probably retain an export market share of 10 to 20 percent. The rice marketing company is actually targeting exports of 300,000 mt in 2001/02

**Table 4-5: Shares of Egyptian Rice Exports by Private and Public Exporters, 1996/97-2000/01**

(metric tons)

| | 1996/97 | | 1997/98 | | 1998/99 | | 1999/00 | | 2000/01 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Volume | % | Volume | % | Volume | % | Volume | % | Volume | % |
| Private Exporters | | | | | | | | | | |
| Top Five (1-5) | 78,500 | 52.6% | 208,582 | 51.0% | 158,581 | 51.5% | 182,300 | 54.9% | 277,089 | 36.5% |
| Second Five (6-10) | 20,427 | 13.7% | 34,890 | 8.5% | 31,504 | 10.2% | NA | - | 138,217 | 18.2% |
| Next Ten (11-20) | 15,326 | 10.3% | 32,631 | 8.0% | 31,191 | 10.1% | NA | - | 122,192 | 16.1% |
| Other Private | 25,340 | 17.0% | 43,676 | 10.7% | 53,271 | 17.3% | NA | - | 110,564 | 14.6% |
| Total Private | 139,593 | 93.6% | 319,779 | 78.2% | 274,546 | 89.1% | 305,923 | 92.1% | 648,063 | 85.3% |
| Public Exporters | | | | | | | | | | |
| Top Two (1-2) | 8,341 | 5.6% | 46,235 | 11.3% | 25,054 | 8.1% | NA | - | 104,535 | 13.8% |
| Next Two (3-4) | 998 | 0.7% | 27,315 | 6.7% | 7,020 | 2.3% | NA | - | 5,159 | 0.7% |
| Other Public | 200 | 0.1% | 15,789 | 3.9% | 1,602 | 0.5% | NA | - | 1,678 | 0.2% |
| Total Public | 9,539 | 6.4% | 89,339 | 21.8% | 33,676 | 10.9% | 26,399 | 7.9% | 111,372 | 14.7% |
| GRAND TOTAL | 149,132 | 100.0% | 409,118 | 100.0% | 308,221 | 100.0% | 332,322 | 100.0% | 759,435 | 100.0% |

Source: MFT/GOEIC

Notes: 1) 1997/98 figures are through 14 October 1998. 1996/97 figures are partial, because final exports (reported in a 1997/98 publication) were 166,163 mt. 1998/99 figures are through 15 September 1999. The final 1999/00 detailed breakdown was never released; the estimate for the

top five private exporters is an approximation based on large exporter recall for 1999/00. 2000/2001 figures cover the period through the end of September 2001.

2) Rounding of 1998/99 figures leads to minor discrepancies in subtotals and totals.

**Table 4-6: Exporter Market Shares, by Volume Shipped, 1996/97 to 2000/01**

| | 1995/96 | | | 1996/97 | | | 1997/98 | | | 1998/99 | | | 2000/01 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **No.** | **Vol.** | **% Share** | **No.** | **Vol.** | **% Share** | **No.** | **Vol.** | **% Share** | **No.** | **Vol.** | **% Share** | **No.** | **Vol.** | **% Share** |
| Private Exporters | | | | | | | | | | | | | | | |
| Exports > 20,000 mt | 2 | 121,899 | 34.3% | 1 | 36,656 | 24.6% | 3 | 184,296 | 45.0% | 3 | 131,188 | 42.6% | 9 | 395,742 | 52.1% |
| Exports > 10,000 mt | 4 | 50,026 | 14.1% | 3 | 35,269 | 23.6% | 2 | 24,286 | 5.9% | 3 | 38,717 | 12.6% | 7 | 101,028 | 13.3% |
| Exports > 5,000 mt | 8 | 60,288 | 17.0% | 3 | 18,667 | 12.5% | 5 | 34,890 | 8.5% | 2 | 11,832 | 3.8% | 6 | 46,388 | 6.1% |
| Exports > 2,000 mt | 13 | 40,250 | 11.3% | 3 | 8,335 | 5.6% | 10 | 32,631 | 8.0% | 17 | 50,904 | 16.5% | 14 | 47,872 | 6.3% |
| Exports > 1,000 mt | 15 | 21,249 | 6.0% | 12 | 18,446 | 12.4% | 14 | 18,780 | 4.6% | 13 | 19,112 | 6.2% | 19 | 25,977 | 3.4% |
| Exports < 1000 mt | | 17,140 | 4.8% | 15 | 10,570 | 7.1% | 18 | 11,922 | 2.9% | 12 | 8,154 | 2.6% | | 31,057 | 4.1% |
| Exports < 500 mt | | | | | 11,650 | 7.8% | | 12,974 | 3.2% | | 14,638 | 4.7% | | | |
| Known Private Exp. | 42 | 310,852 | 87.5% | 37 | 139,593 | 93.6% | 52 | 319,779 | 78.2% | 50 | 274,545 | 89.1% | 55 | 648,064 | 85.3% |
| Subtotal, Millers | 5 | 81,814 | 23.0% | 8 | 32,598 | 21.9% | 11 | 204,701 | 50.0% | 9 | 64,237 | 20.8% | 9 | 198,156 | 26.1% |
| | | | | | | | | | | | | | | | |
| Public Exporters | | | | | | | | | | | | | | | |
| Exports > 10,000 mt | 1 | 21,600 | 6.1% | | | | 4 | 73,550 | 18.0% | 1 | 15,080 | 4.9% | 1 | 100,665 | 13.3% |
| Exports > 5,000 mt | 2 | 12,479 | 3.5% | 1 | 7760 | 5.2% | 1 | 8,850 | 2.2% | 1 | 9,974 | 3.2% | | | |
| Exports > 1,000 mt | 3 | 10,300 | 2.9% | | | | 3 | 6,679 | 1.6% | 2 | 7,020 | 2.3% | 4 | 10,071 | 1.3% |
| Exports > 500 mt | | | | 3 | 1579 | 1.1% | | | | 1 | 982 | 0.3% | | | |
| Exports < 500 mt | | | | 1 | 200 | 0.1% | 2 | 260 | 0.1% | 2 | 620 | 0.2% | 3 | 636 | 0.1% |
| Total Public | 6 | 44,379 | 12.5% | 5 | 9,539 | 6.4% | 10 | 89,339 | 21.8% | 7 | 33,676 | 10.9% | 8 | 111,372 | 14.7% |
| Subtotal, Millers | 0 | 0 | 0.0% | 3 | 1,198 | 0.8% | 0 | 0 | | 0 | 0 | 0.0% | 4 | 9,139 | 1.2% |
| | | | | | | | | | | | | | | | |
| Total Reported No. | 48 | 355,231 | 100.0% | 42 | 149,132 | 100.0% | 62 | 409,118 | 100.0% | 57 | 308,221 | 100.0% | 63 | 759,436 | 100.0% |
| Estim. No. Exporters | 77 | | | 75 | | | 99 | | | 99 | | | 115 | | |

Source: MFT/GOEIC

Notes: 1) No final breakdown of rice exports by exporter is available for 1999/2000. Exporters asked that such a breakdown not be released that year.

2) The calculated total rice exports for 2000/01 are slightly different than the reported total of 755,434 mt.

3) The number of private exporters shipping the smallest volumes in each year is not known. We estimate their numbers by assuming that exporters shipping less than 1,000 mt each (in 1995/96 and 2000/01) shipped an average of 600 mt/shipper, while exporters shipping less than 500 mt each (in 1997/98 and 1998/99) shipped an average of 350 mt/shipper. The estimated number of small shippers is then added to the known numbers of private and public exporters.

In 2000/01, 16 private exporters and one public one shipped at least 10,000 mt each. Four of the top private exporters are major commercial millers. Another export leader has some milling (finishing, polishing) and sorting equipment, and another one is planning to invest in its own rice milling facilities. Among the top 55 private exporters, 9 are millers. The vast majority are commodity traders who often also import and export other commodities, such as sugar, beans and oilseeds (import) and potatoes and other horticultural products (export). Leading private exporters who dominated rice exports during the 1990s complain that increased participation, typically by non-specialists, has brought problems. They claim that there is more varietal mixing (e.g., of Giza 178 with a shorter grain variety such as Giza 177 or Sakha 101/102), less attention to quality, and increased confusion among importers (customers) over whom is reliable as exporters. At the same time, it is important to recognize that the newcomers have cut into the more well-established exporters' market shares. A very prominent rice exporter stated that, despite some varietal mixing and irregularities, many of the newcomers are doing their jobs well, exporting high-quality rice that matches specifications. Overall, competition and quality appear to have increased.

Unlike 4-5 years ago, leading rice exporters are shipping rice now in cartons filled with five-kilogram and one-kilogram retail packs, often with the brand name of an importer or a supermarket chain in the importing country. In the past, almost all rice was shipped in 25 kg. sacks and never in retail packs. One exporter has even developed a brand name for his best-quality rice–*Aunty Beheya's Cairose*, reminiscent of *Uncle Ben's* parboiled rice produced in the U.S. *Cairose* is also very close to *Calrose*, which is how California medium-grain rice is known in the international rice trade. *Aunty Beheya's Cairose*, sold in both five-kilogram and one-kilogram retail packs in traditional Eastern Mediterranean markets, is selling well in supermarkets and is being promoted using television spots on local TV. Increased competition appears, therefore, to have spurred the industry leaders to keep innovating to protect their market shares and capture new markets. The link between heightened competition and a more progressive rice milling and export industry will work, over time, to the industry's benefit. Rather than shipping a relatively undifferentiated commodity with little value added (in 25 kg. bags) to nearby Mediterranean and Arab markets, exporters will ship more higher priced retail packs to more upscale buyers, supermarket chains serving affluent customers. In contrast, however, new COMESA markets and traditional African importers such as Sudan will import the cheapest rice available and will not be willing to pay the higher prices for the better varieties, grades and packaging. It is likely that the established exporters are targeting the upscale portions of traditional markets, whereas many of the newcomers and smaller exporters are shipping the lowest-cost rice available to less discriminating markets in Africa and Eastern Europe/NIS. The data are not sufficiently disaggregated, however, to test this hypothesis.

### 4.3.4 Exports by Type of Rice and Grade

As in past years, the majority of rice exports (52.6%) has been as *camolino*, with 80% of this type of rice classified as grade 2. The percentage of rice exports as *camolino* was far lower than in 1998/99, when it reached 75.1%. Exports of natural rice reached 33.5% in 2000/01, significantly higher than the 16.8% of 1998/99. Within this category, natural grade 2 exports were the largest, at 102,876 mt, and comprised mainly of shipments to Libya, which asked for this specification.

**Table 4-7: Breakdown of Exports by Type of Rice and Grade, 2000/01**

| Rice Type | Grade | Percent Brokens | Volume Exported | Percent of Total | Percent of Subtotal |
|---|---|---|---|---|---|
| Camolino | 1 | < 3% | 29,201.1 | 3.9% | 7.4% |
| | 2 | < 6% | 317,914.7 | 42.2% | 80.1% |
| | 3 | < 12% | 27,670.9 | 3.7% | 7.0% |
| | 4 | < 20% | 21,790.0 | 2.9% | 5.5% |
| | 5 | < 30% | 0.0 | 0.0% | 0.0% |
| | 6 | < 40% | 500.0 | 0.1% | 0.1% |
| Subtotal | | | 397,076.6 | 52.6% | 100.0% |
| Natural | 1 | < 3% | 3,371.1 | 0.4% | 1.3% |
| | 2 | < 6% | 102,875.9 | 13.6% | 40.7% |
| | 3 | < 12% | 60,969.8 | 8.1% | 24.1% |
| | 4 | < 20% | 79,563.4 | 10.5% | 31.5% |
| | 5 | < 30% | 4,590.5 | 0.6% | 1.8% |
| | 6 | < 40% | 1,177.0 | 0.2% | 0.5% |
| Subtotal | | | 252,547.7 | 33.5% | 100.0% |
| Brokens | | 100% | 35,380.0 | 4.7% | |
| Paddy | | | 192.0 | 0.03% | |
| Cargo | | | 69,029.5 | 9.2% | |
| **TOTAL** | | | **754,225.8** | **100.0%** | |

Source: GOEIC, MEFT

Notes: 1) Camolino is natural rice treated with 5 liters of paraffin oil per ton.

2) Cargo is dehusked, brown rice. It is typically further dehulled & polished to produce white rice.

3) There are slight discrepancies between the calculated total rice exports in the table and GOEIC's reported rice exports.

Substantial exports (140,533 mt) of natural grades 3 and 4 were shipped primarily to Sub-Saharan African markets. Recorded exports of cargo, 69,030 mt or 9.2% of total rice exports, were over four times the 1998/99 level. Exports of broken rice also rose to 35,380 mt (4.7% of the total) in 2000/01, again about four times the 1998/99 level.

The increasing proportions of exports represented by natural white rice, cargo and brokens suggest that more product differentiation and niche market targeting is being practiced by Egyptian exporters. This, as well as the increase since the early 1990s in the number of export destinations, is evidence of increasing maturation of Egyptian rice exporters and better understanding of different markets' requirements.

### 4.3.5 Rice Export Prices, 1999/00 and 2000/01

Illustrative rice export prices for *camolino* and natural rice types are shown in Table 4-8 for the past two marketing seasons.[25] Prices were highest in 1999/00, ranging from $335-360/mt, and then

[25]Export price data from the London Rice Brokers' Association (see Table 3-3) and CAPMAS (Table 3-4) parallel the prices presented in Table 4-8. CAPMAS price data showed that the average unit value for the March-August 2001 period was $199/mt, while the LRBA data show exceptionally low offer price quotes for April-May 2001 and continuing into September 2001 before

dropped 14-15% by the beginning of the 2000/01 export season to the $285-310/mt range. Following the export subsidy announcement in late January 2001, prices decreased further by 19-20% to $225-250/mt. Prices for certain lower grades of rice, particularly natural 3/4, reportedly fell another 10-12% to about $200/mt or lower by late in the 2000/01 marketing season. Egyptian export offer prices firmed by late October 2001, as the domestic supply of paddy tightened relative to 2000/01 and as traders were alleged to be hoarding paddy in anticipation of a second year of rice export subsidies. A smaller crop in 2001 than announced by MALR also contributed to higher rice prices.

**Table 4-8: Illustrative Rice Export Prices, by Type and Grade, 1999/00 and 2000/01**

| | 1999/00 Season | | Early 2000/01 | | Mid-2000/01 | |
|---|---|---|---|---|---|---|
| Type/ Grade | Price $/mt | Date of Shipment | Price $/mt | Date of Shipment | Price $/mt | Date of Shipment |
| Cam. 1 | 360 | Oct. 99-Feb. 00 | 310 | Oct. 2000 | 250 | Nov. 2000 |
| Cam. 2 | 350 | Nov.-Dec. 99 | 300 | Oct. 2000 | 240 | Nov. 2000 |
| Cam (3) | 340 | Oct. 99-Feb. 01 | 290 | Oct. 2000 | 230 | Nov.-Dec.00 |
| Natl. 1 | 355 | Oct.-Dec. 99 | 305 | Oct. 2000 | 245 | Nov.-Dec.00 |
| Natl. 2 | 345 | Nov. 99-Mar. 00 | 295 | Oct. 2000 | 235 | Oct. 2000 |
| Natl. 3 | 335 | Oct.-Dec. 99 | 285 | Oct. 2000 | 225 | Oct.-Nov 00 |

Source: Interviews of private and public rice exporters.
Note: The above-mentioned prices are average export prices for both thick and thinner rice varieties.

turning upward as of October 2001.

# 5. RECENT DEVELOPMENTS IN INTERNATIONAL AND REGIONAL MARKETS

For most types of internationally traded rice, prices declined steadily from the end of the 1997/98 export marketing year and beginning of the 1998/99 marketing year to the beginning of the 2001/02 marketing year before firming somewhat following the September 2002 trough (see Figure 5-1 and Annex Table A2-6 ). The major factor underlying this was strong rice crops in most producing countries for several years, with the 1999 harvests being the largest. This led to greater self-sufficiency in major consuming and importing countries that are also rice producers, and to build-ups in stocks in major exporting countries. USDA anticipated that 2001/02 would be the fourth straight year of declining global trade (see August 2001 *Rice Outlook*). World ending stocks for the 2000/01 season of 127.4 mmt were below the 1999/2000 level, but still high (31.6% of anticipated world rice consumption in 2001/02).

Prices of different types of internationally traded long-grain rice are highly correlated (r=0.86-0.96 over the August 1997-December 2001 period). Long-grain rice prices are less strongly correlated with medium-grain rice prices (r=0.40-0.57). The prices of *Calrose* and Egyptian rice (using unit values) are somewhat more correlated (r=0.68). The correlation would likely be stronger if prices for one type of Egyptian rice, that is comparable to *Calrose*, were used in the calculation. The Egyptian unit values mix higher-grade *camolino* rice with natural, cargo and 100% brokens.

*The Rice Subsector Baseline Update* of January 2000 classified and described Egypt's export markets in detail. This section offers a selective and focused update.

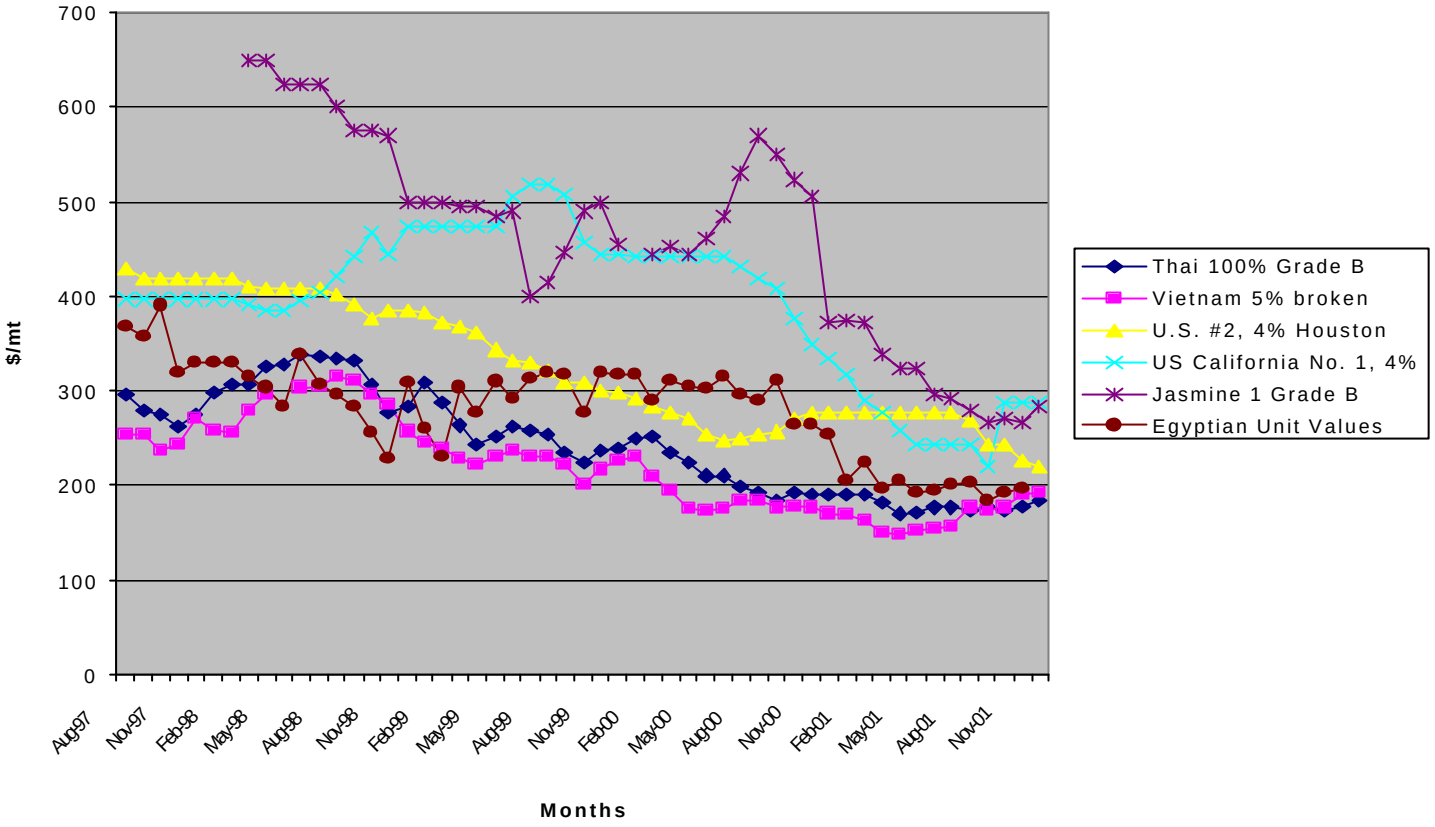
## 5.1 General World Market Developments

For most types of internationally traded rice, prices have declined steadily since the end of the 1997/98 export marketing year and beginning of the 1998/99 marketing year. The major factor underlying this was strong rice crops in most producing countries for several years, with the 1999 harvests being the largest. This led to greater self-sufficiency in major consuming and importing countries that are also rice producers, and to build-ups in stocks in major exporting countries. USDA anticipates that 2001/02 will be the fourth straight year of declining global trade (see August 2001 *Rice Outlook*). World ending stocks for the 2000/01 season of 127.4 mmt are below the 1999/2000 level, but still high (31.4% of anticipated world rice consumption in 2001/02).

### 5.1.1 U.S. Medium-Grain Rice

By the beginning of the 1999/2000 season, prices of most internationally traded rice types were still weak, but U.S. medium-grain rice prices actually had risen to astronomical levels of over $500/mt on thinly traded volume (June-September 1999). This proved to be a short-lived phenomenon, driven by short U.S. pre-harvest stocks (due to the poor rice harvest in California in 1998) and fall 1999 quota sales to Japan. After these sales were completed, and

**Figure 5-1: Monthly Prices of Internationally Traded Rice August 1997 - December 2001**




Source: See table A2-6 in Annex 2. The main sources are the USDA/ERS *Rice Situation* and CAPMAS.

once the 1999 medium-grain rice crop was harvested, milled and ready for export (by December 1999), U.S. prices dropped sharply. By October 1999, California medium-grain rice prices had dropped ten percent from September to $458/mt. They remained well above $400/mt until September 2000, at which point they dropped to the mid-$200 range by April 2001. The price of California medium grain rice, 4% brokens, grade 1 began the 2001/02 marketing season in September 2001 at $220/mt, 58 percent below the September 1999 level. Prospects for firmer medium-grain rice prices are good in 2001/02, as the 2001 California crop is smaller than the 2000 crop. In October/November 2001, prices for California rice strengthened from the very low levels of May-September 2001 by 18% to $287/mt, still below the levels of the first half of the 2000/01 export marketing season (when prices opened at $419/mt in August 2000 but fell to $290/mt by February 2001).

### 5.1.2 Egyptian Rice

From November 1997 to September 2000, the average unit value of Egyptian export rice remained in the $228-338/mt range, and clustered even more tightly to the $278-320/mt range for the entire 1999/2000 season. While the average unit value was $312/mt in September 2000, at the beginning of the 2000/01 export marketing season, it fell to the $254-265/mt range in the remaining months of 2000 before declining sharply to $206/mt in January 2001 and falling below $200/mt in most months after that in 2001. As discussed in Chapter 3, the subsidy paid to Egyptian rice exporters enabled them to cut their prices from about $25-50 per ton as of 23 January 2001. This greatly enhanced the competitiveness of Egyptian rice vis-a-vis American and Australian medium-grain rice during the remainder of the 2000/01 marketing season. Giza 178, the most heavily subsidized variety, was priced at levels comparable to Thai, Vietnamese and Pakistani long-grain rice. A lot of Giza 178 was sold in Sub-Saharan African markets, where it was not subject to duties (in COMESA partner countries) and priced lower than competing long-grain Asian rice.

## 5.2 Regional Market Developments

After losing ground in several key Mediterranean markets in 1999/2000, Egypt recaptured lost market share in 2000/01. The implementation of subsidies appears to be have been the main reason for this improved performance. Egyptian rice was able to out-compete U.S., Australian and Chinese rice, to which it lost ground in 1999/2000. US and Egyptian exports to different destinations over the past four market years are shown in Table 5-1.

FOB export prices for Egyptian rice are shown by major importing country market from June 1999 through November 2001 in Table 5-2. Note that the average annual prices are highest for Saudi Arabia, which receives premium grade rice, moderately high for Turkey and Jordan, two fairly discriminating markets, and generally lowest for Romania, which receives cargo, Sudan and Palestine. Turkey is a special case, where the composition of rice exports has changed since 1999, when Turkey imported primarily Giza 171 and 177, the best and most preferred Egyptian varieties. The mean price in the second half of 1999 was $381/mt, which was probably influenced by the high levels at which Calrose, US medium-grain rice which competes with short- and medium-grain Egyptian rice, was selling ($506-518/mt from June to September, $458/mt in October, and $445/mt in November and December 1999). By CY 2000, the mean export price on Egyptian rice shipments to Turkey had dropped to $275/mt; it then fell further to $197/mt in 2001 (for the first eleven months). Not only did the general level of Egyptian rice export prices decline from the 1999/00 season to the 2000/01 season, but it appears as if relatively more Giza 178, a thinner and longer medium-grain variety less preferred in export markets, was being shipped to Turkey by 2000/01.

**Table 5-1: U.S. and Egyptian Rice Exports to Selected Markets, 1997/98 to 2000/01**

(exports in '000 mt)

| Market | U.S. Exports | | | | Egyptian Exports | | | |
|---|---|---|---|---|---|---|---|---|
| Destinations | 2000/01 | 1999/00 | 1998/99 | 1997/98 | 2000/01 | 1999/00 | 1998/99 | 1997/98 |
| Turkey | 171 | 231 | 100 | 115 | 113 | 66 | 67 | 118 |
| % Total | 6.5% | 7.6% | 3.4% | 4.1% | 14.9% | 19.8% | 21.8% | 28.9% |
| Jordan | 14 | 21 | 41 | 42 | 24 | 14 | 20 | 28 |
| % Total | 0.5% | 0.7% | 1.4% | 1.5% | 3.2% | 4.2% | 6.5% | 6.9% |
| Saudi Arabia | 140 | 151 | 106 | 96 | 6 | 6 | 1 | 2 |
| % Total | 5.3% | 5.0% | 3.6% | 3.5% | 0.8% | 1.8% | 0.3% | 0.5% |
| Africa | 182 | 171 | 157 | 171 | 141 | 48 | 39 | 24 |
| % Total | 6.9% | 5.6% | 5.4% | 6.2% | 18.6% | 14.4% | 12.7% | 5.9% |
| Western Europe | 377 | 405 | 360 | 341 | 42 | 4 | 8 | 10 |
| % Total | 14.2% | 13.3% | 12.3% | 12.3% | 5.5% | 1.2% | 2.6% | 2.5% |
| Eastern Europe | 1 | 1 | 0 | 0 | 107 | 49 | 79 | 71 |
| NIS | 1 | 57 | 43 | 2 | 55 | 7 | 4 | 33 |
| EE & NIS | 2 | 58 | 43 | 2 | 162 | 56 | 83 | 104 |
| % Total | 0.1% | 1.9% | 1.5% | 0.1% | 21.4% | 16.8% | 26.9% | 25.5% |
| W. Hemisphere | 1305 | 1410 | 1741 | 1718 | 0 | 0 | 0 | 0 |
| % Total | 49.2% | 46.3% | 59.4% | 61.8% | 0.0% | 0.0% | 0.0% | 0.0% |
| Total | 2651 | 3044 | 2929 | 2780 | 757 | 334 | 308 | 408 |

Sources: MFT/GOEIC and USDA/ERS

Note: The U.S. export market year is defined as August to July. The Egyptian market year is defined as October of one year to September of the next year.

### 5.2.1 Turkish Market

Egypt expanded rice exports in 2000/01 to over 113,000 mt relative to the 66,900 mt in 1998/99 and 66,400 mt in 1999/00. In contrast, US rice exports, almost entirely Southeastern and California medium-grain, dropped from 231,000 mt in 1999/00 to an estimated 171,000 mt in 2000/01. MVE lacks access to data on Turkish imports of Chinese rice, but Egyptian exporters say that China shipped progressively more rice to Turkish ports during the late 1990s but that 2000/01 witnessed a scaling back of Chinese shipments to Turkey.

### 5.2.2 Syrian Market

Syria was the number two market for Egypt from 1995/96 through 1998/99, averaging imports of 58,593 mt of Egyptian rice. Syrian consumers have a strong preference for Egyptian short-grain rice, and several Egyptian exporters have established a strong commercial relationship with the emerging private rice trade. Exports to Syria in 2000/01 jumped to a record level of 159,600 mt. Note that the Syrian rice trade appears to no longer be completely dominated by the Ministry of Supply, though the Syrian Government remains a major buyer of rice from Egyptian public buyers (FIHC and the Rice Marketing Company). Private importers ship relatively small quantities, not usually exceeding 1,000 mt per shipment, in contrast to the Syrian Government, which typically receives 12,000 mt per shipment. In 2000/01, a large proportion of Egypt's public sector rice shipments to Syria were paid for through bartered Syrian cottonseed oil.

**Table 5-2: Monthly Export Prices (FOB) for Egyptian Rice, by Major Importing Country, June 1999-August 2001**

$/mt

| Year | Month | Syria | Jordan | Turkey | Romania | Saudi Arabia | Sudan | Palestine |
|---|---|---|---|---|---|---|---|---|
| **1999** | June | 324 | 150 | 480 | 171 | 165 | | |
| | July | 290 | | 424 | 250 | 438 | | 300 |
| | August | | | 424 | 163 | | | 300 |
| | September | 322 | 371 | 375 | 249 | 384 | 243 | 284 |
| | October | 288 | 355 | 286 | 186 | 576 | 300 | 306 |
| | November | 303 | 350 | 332 | 213 | 325 | 316 | 262 |
| | December | 311 | 341 | 343 | 250 | 327 | 274 | 271 |
| | ***Average*** | **306** | **313** | **381** | **212** | **369** | **283** | **287** |
| **2000** | January | 327 | 296 | 282 | 280 | 333 | 302 | |
| | February | 291 | 308 | 326 | 204 | 309 | 250 | |
| | March | 330 | 283 | 190 | 364 | 275 | 352 | 257 |
| | April | 321 | 321 | 354 | 115 | 320 | 320 | 277 |
| | May | 337 | 369 | 376 | 180 | 385 | 297 | 297 |
| | June | 297 | 308 | 244 | 223 | 346 | 350 | 243 |
| | July | 304 | 350 | 246 | 253 | 300 | 286 | 296 |
| | August | 323 | 281 | 276 | 189 | 344 | 213 | 288 |
| | September | 299 | 284 | 243 | 174 | 332 | 273 | 266 |
| | October | 273 | 271 | 262 | 173 | 312 | 252 | 259 |
| | November | 270 | 264 | 246 | 149 | 282 | 235 | 255 |
| | December | 261 | 275 | 259 | 196 | 224 | 184 | 266 |
| | ***Average*** | **303** | **301** | **275** | **208** | **313** | **276** | **270** |
| **2001** | January | 264 | 256 | 207 | 172 | 245 | 230 | 300 |
| | February | 239 | 248 | 211 | 195 | 226 | 231 | 204 |
| | March | 222 | 225 | 207 | 150 | 264 | 171 | 218 |
| | April | 238 | 213 | 193 | 181 | 243 | 200 | 211 |
| | May | 197 | 193 | 181 | 180 | 202 | 195 | 259 |
| | June | 208 | 194 | 202 | 184 | 234 | 209 | |
| | July | 209 | 206 | 208 | 173 | 247 | 153 | 230 |
| | August | 208 | 240 | 187 | 202 | 258 | 194 | 204 |
| | September | 221 | 197 | 189 | 138 | 242 | 169 | 173 |
| | October | 151 | 248 | 203 | 227 | 229 | 147 | 188 |
| | November | 231 | 233 | 195 | 173 | 232 | 214 | 285 |
| | ***Average*** | **212** | **219** | **197** | **180** | **238** | **188** | **219** |

Source: CAPMAS

Notes: 1) The reported prices are for the main category of Egyptian ricereported by CAPMAS, "rice, whether polished or not."

2) Blank cells indicate that there were no exports to a particular country during a particular month.

Rice consumption in Syria is an estimated 12 kg. per capita, which is rather low. In 1999, Egypt supplied 49.0% of Syria's imported rice, higher than the 30.6% of 1997 and the 34.3% of 1998. During the 2000/01 marketing season, Egypt's market share has certainly been higher. FAO statistics are reported on a calendar year basis, however, with a lag of at least one year. Year 2000 statistics should be available by the end of APRP.

### 5.2.3 Other Markets

Jordan and Lebanon continued to be important medium-sized customers for Egyptian rice in 2000/01, importing 24,300 mt and 14,600 mt respectively. Egypt supplied 20.2% of Jordan's imported rice in 1999 and 19.8% of Lebanon's rice. The Jordanian people consumed an average of 20.7 kg. per capita in 1999, while the Lebanese consumed 10.5 kg.

Libya became a major market destination for Egyptian rice, particularly rice processed by public milling companies, in 1999/00 (48,000 mt) and 2000/01 (73,000 mt). Rice destined for Libya was milled in ESA rice mills and shipped mainly by the Rice Marketing Company, a public company that led all companies in exports in 2000/01. In 1998, Egypt supplied 13.8% of Libya's requirements, but in 1997 and 1999 Egypt supplied only 1.5% and 1.2% of Libya's total rice imports. Egypt's share undoubtedly expanded in 2000 and 2001.

After a disappointing 1999/00 export season, when Romanian rice imports from Egypt dropped from 52,400 mt to 37,300 mt, Egyptian shipments of rice, mainly cargo, to Romania reached 84,200 mt in 2000/01. Total exports to Eastern European and NIS markets exceeded 100,000 mt for the first time since 1997/98, attaining a record 162,400 mt. Exports to Ukraine (37,700 mt) and Russia (16,300 mt) achieved record levels as well in 2000/01, with shipments to Albania (9,300 mt) and Bulgaria (10,600 mt) also significant. Note that much of the rice shipped to Romania is as cargo; this rice is further milled in Bucharest and sold in the domestic market.

Exports to Sudan surged in the last several months of the 2000/01 marketing season to attain nearly the same level (35,400 mt) as those of 1999/00 (36,500 mt). Overall exports to African countries (excluding Libya) nearly tripled over 1999/00's previous high of 48,200 mt to 148,200 mt, driven by the export subsidy, which made Egypt far more competitive in Côte d'Ivoire (19,400 mt), Senegal (14,500 mt) and Tanzania (18,300 mt) than in previous years, when Egypt shipped sporadically to these destinations.

## 5.3 Characteristics of Egyptian Rice Export Markets and Competitors

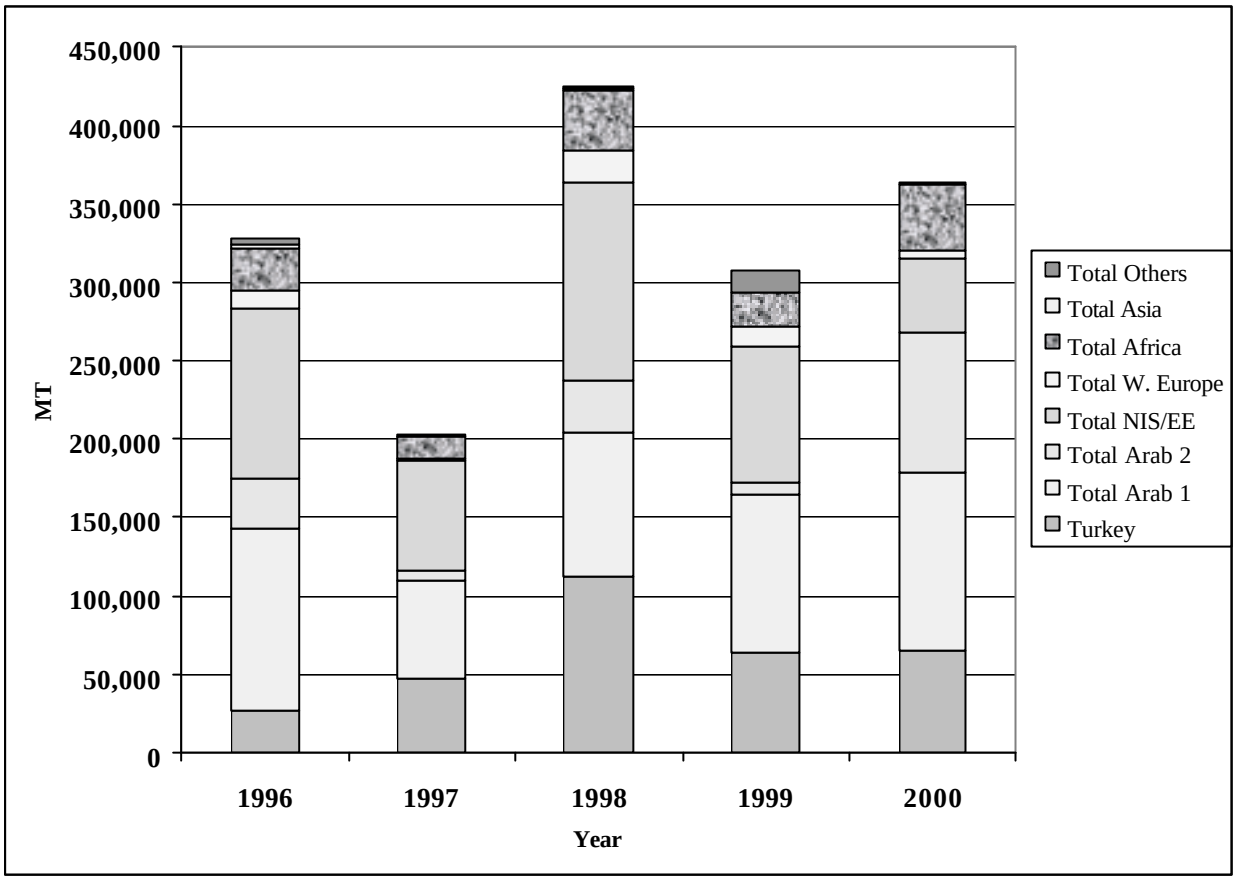
Table 5-3, updated from the January 2000 *Rice Subsector Baseline Update*, presents 1999 data (from FAO) that provide insights into the characteristics of key markets for Egyptian rice, dividing the importers into several categories: Mediterranean Arab, Mediterranean non-Arab, Gulf, Black Sea (Eastern Europe and the NIS), and Africa. This breakdown is consistent with our reporting of the export data in Table 4-3. Figure 5-2 shows the characteristics of major markets for Egyptian rice exports by market type by calendar year (see Annex tables for the actual statistics of exports country by country, and group by group, for the last five calendar years). The largest shares of Egyptian

exports have been shipped to Turkey, Arab 1 (Syria, Jordan, Lebanon and Palestine), and the NIS/Eastern European markets. As shown in the bar chart, the fluctuation in relative share sizes and proportions has been quite substantial, depending on the prices offered and volumes shipped by international competitors.

Data appearing in Tables 5-4 through 5-6 use FAO data from 1997 through 1999 on rice imports, Egypt's share of these imports, and per capita rice availability for the key Egyptian rice markets (and several major producers and exporters). They highlight features of the same sets of markets that would be of interest to an Egyptian rice exporter, notably total imports, Egypt's share of those imports, and per capita rice availability. Low levels of rice consumption do not necessarily indicate an unpromising foreign market; countries that consume limited rice may be good candidates for export promotion. This depends on their income levels, the income elasticity of demand for rice (in comparison to other staple foods), and consumer tastes and preferences and any recent shifts. An understanding of these factors, and how they interplay in individual target markets, can be obtained through in-depth foreign market research, which is beyond the scope of this update.

Table 5-3 Characteristics of Key Markets for Egyptian Milled Rice, 1999

**Figure 5-2: Egyptian Rice Exports to Major Market Destinations, 1996 to 2000**



## Table 5-4: Egyptian Rice Exports to Key Markets and Export Shares in those Markets, 1999

| Region | Country | Pop. (mill.) | Imports [2] | Egyptian Exports | | Per Capita |
|---|---|---|---|---|---|---|
| | | 1999 [2] | ('000 mt) | Vol.[1] | % Total | Rice Avail [2] |
| | | | | ('000 mt) | | (kg.) |
| Mediterranean | | | | | | |
| Arab | Syria | 15.72 | 128.0 | 62.7 | 49.0 | 12.0 |
| | Jordan | 4.82 | 114.0 | 23.0 | 20.2 | 20.7 |
| | Lebanon | 3.24 | 51.0 | 10.1 | 19.8 | 10.5 |
| | Libya | 5.47 | 110.0 | 1.3 | 1.2 | 15.5 |
| Mediterranean | | | | | | |
| Non-Arab | Turkey | 65.55 | 265.0 | 64.5 | 24.3 | 7.2 |
| | Israel | 6.10 | 86.0 | 0.6 | 0.7 | 9.9 |
| | Italy | 57.34 | 64.0 | 5.0 | 7.8 | 5.9 |
| | Spain | 39.63 | 157.0 | 0.1 | 0.1 | 7.6 |
| Gulf | | | | | | |
| | Saudi Arabia | 20.90 | 768.0 | 4.8 | 0.6 | 33.3 |
| | Kuwait | 1.90 | 126.0 | 1.3 | 1.0 | 48.4 |
| | UAE | 2.40 | 472.0 | 4.1 | 0.9 | 61.7 |
| Black Sea | | | | | | |
| | Romania | 22.40 | 76.0 | 55.6 | 73.2 | 3.4 |
| | Bulgaria | 8.28 | 17.0 | 10.5 | 61.8 | 2.1 |
| | Ukraine | 50.66 | 69.0 | 2.4 | 3.5 | 2.1 |
| | Moldova | 4.38 | 4.0 | 0.6 | 15.0 | 0.9 |
| | Russia | 147.20 | 581.0 | 0.7 | 0.1 | 5.4 |
| Africa | | | | | | |
| | Sudan | 28.90 | 14.0 | 11.8 | 84.3 | 1.4 |
| | Kenya | 29.55 | 54.0 | 6.1 | 11.3 | 2.7 |
| | Senegal | 9.24 | 622.0 | 3.3 | 0.5 | 70.8 |
| | Cote d'Ivoire | 14.53 | 637.0 | 0.0 | 0.0 | 80.2 |
| Major | | | | | | |
| Producers or | USA | 276.22 | 458.0 | 80.0 | 17.5 | 9.1 |
| Exporters | China | 1274.11 | 583.0 | 0.0 | 0.0 | 90.3 |
| | Australia | 18.70 | 58.0 | 0.0 | 0.0 | 8.0 |
| | Indonesia | 209.25 | 4,725.0 | 0.0 | 0.0 | 154.1 |
| | Thailand | 60.86 | 3.0 | 0.0 | 0.0 | 102.7 |

Source: CAPMAS, FAO, Table 5-3

## Table 5-5: Egyptian Rice Exports to Key Markets and Export Shares in those Markets, 1998

| Region | Country | Pop. (mill.) | Imports [2] | Egyptian Exports | | Per Capita |
|---|---|---|---|---|---|---|
| | | 1999 [2] | ('000 mt) | Vol.[1] | % Total | Rice Avail [2] |
| | | | | ('000 mt) | | (kg.) |
| Mediterranean | | | | | | |
| Arab | Syria | 15.30 | 136.1 | 46.7 | 34.3 | 9.3 |
| | Jordan | 4.70 | 87.9 | 26.7 | 30.4 | 21.5 |
| | Lebanon | 3.19 | 37.2 | 15.5 | 41.7 | 10.7 |
| | Libya | 5.34 | 119.2 | 16.5 | 13.8 | 15.5 |
| Mediterranean | | | | | | |
| Non-Arab | Turkey | 64.48 | 275.3 | 112.1 | 40.7 | 7.7 |
| | Israel | 5.98 | 86.5 | 0.9 | 1.0 | 10.0 |
| | Italy | 57.37 | 60.9 | 0.1 | 0.2 | 6.1 |
| | Spain | 39.63 | 82.4 | 17.6 | 21.4 | 7.6 |
| Gulf | | | | | | |
| | Saudi Arabia | 20.18 | 783.1 | 11.3 | 1.4 | 34.2 |
| | Kuwait | 1.81 | 111.9 | 1.3 | 1.2 | 48.1 |
| | UAE | 2.35 | 398.0 | 4.1 | 1.0 | 61.7 |
| Black Sea | | | | | | |
| | Romania | 22.47 | 63.6 | 62.9 | 98.9 | 4.4 |
| | Bulgaria | 8.34 | 26.9 | 16.9 | 62.8 | 2.5 |
| | Ukraine | 50.86 | 64.2 | 25.4 | 39.6 | 2.0 |
| | Moldova | 4.38 | 4.2 | 0.6 | 14.3 | 1.6 |
| | Russia | 147.43 | 264.9 | 5.4 | 2.0 | 3.7 |
| Africa | | | | | | |
| | Sudan | 28.29 | 55.2 | 33.5 | 60.7 | 1.3 |
| | Kenya | 29.01 | 62.8 | 0.1 | 0.2 | 3.3 |
| | Senegal | 9.00 | 557.1 | 0.0 | 0.0 | 68.1 |
| | Cote d'Ivoire | 14.29 | 440.0 | 4.3 | 1.0 | 79.8 |
| Major | | | | | | |
| Producers or | USA | 274.03 | 278.6 | 0.0 | 0.0 | 8.6 |
| Exporters | China | 1262.82 | 246.9 | 0.0 | 0.0 | 91.4 |
| | Australia | 18.52 | 37.2 | 0.0 | 0.0 | 8.0 |
| | Indonesia | 206.34 | 1,894.9 | 0.0 | 0.0 | 152.2 |
| | Thailand | 60.30 | 836.0 | 0.0 | 0.0 | 107.3 |

Source: CAPMAS, FAO, Table 5-3

## Table 5-6: Egyptian Rice Exports to Key Markets and Export Shares in those Markets, 1997

| Region | Country | Pop. (mill.) | Imports (2) | Egyptian Exports | | Per Capita |
|---|---|---|---|---|---|---|
| | | 1999 (2) | ('000 mt) | Vol.(1) | % Total | Rice Avail (2) |
| | | | | ('000 mt) | | (kg.) |
| Mediterranean | | | | | | |
| Arab | Syria | 14.95 | 136.1 | 41.7 | 30.6 | 9.6 |
| | Jordan | 4.52 | 104.5 | 4.5 | 4.3 | 20.8 |
| | Lebanon | 3.14 | 44.6 | 13.7 | 30.7 | 10.5 |
| | Libya | 5.21 | 113.4 | 1.7 | 1.5 | 15.4 |
| Mediterranean | | | | | | |
| Non-Arab | Turkey | 63.40 | 267.9 | 46.6 | 17.4 | 7.3 |
| | Israel | 5.86 | 98.5 | 0.4 | 0.4 | 10.2 |
| | Italy | 57.38 | 78.3 | 0.0 | 0.0 | 6.0 |
| | Spain | 39.61 | 85.6 | 0.5 | 0.6 | 7.5 |
| Gulf | | | | | | |
| | Saudi Arabia | 19.48 | 705.0 | 1.4 | 0.2 | 32.8 |
| | Kuwait | 1.73 | 104.8 | 0.8 | 0.8 | 48.0 |
| | UAE | 2.31 | 341.0 | 3.1 | 0.9 | 61.5 |
| Black Sea | | | | | | |
| | Romania | 22.55 | 66.3 | 40.3 | 60.8 | 3.1 |
| | Bulgaria | 8.39 | 34.2 | 5.7 | 16.7 | 3.3 |
| | Ukraine | 51.06 | 52.7 | 13.7 | 26.0 | 1.8 |
| | Moldova | 4.38 | 16.2 | 0.0 | 0.0 | 4.1 |
| | Russia | 147.66 | 375.6 | 4.8 | 1.3 | 3.6 |
| Africa | | | | | | |
| | Sudan | 27.72 | 19.9 | 13.3 | 66.8 | 0.9 |
| | Kenya | 28.45 | 62.4 | 0.0 | 0.0 | 3.3 |
| | Senegal | 8.77 | 402.0 | 0.0 | 0.0 | 64.4 |
| | Cote d'Ivoire | 14.06 | 470.0 | 0.0 | 0.0 | 67.4 |
| Major | | | | | | |
| Producers or | USA | 271.77 | 361.6 | 0.1 | 0.0 | 8.4 |
| Exporters | China | 1251.16 | 330.4 | 0.0 | 0.0 | 91.9 |
| | Australia | 18.33 | 42.8 | 0.0 | 0.0 | 8.2 |
| | Indonesia | 203.38 | 348.1 | 0.0 | 0.0 | 146.9 |
| | Thailand | 59.74 | 325.0 | 0.0 | 0.0 | 106.9 |

Source: CAPMAS, FAO, Table 5-3

## 6. AN UPDATE ON ESA RICE MILLS

This section will discuss briefly MVE observations on the activities and performance of the ESA rice milling companies. MVE continues to have difficulties in obtaining timely and accurate information from the Food Industries Holding Company (FIHC). Access to information has not improved perceptibly after the incorporation of the RFM-HC into the Food Industries Holding Company in December 1999.

### 6.1 Completion of Privatization

Six of the eight public sector rice milling companies were privatized during a four-month period during the second half of 1998 (and one at the beginning of 1998). As shown in Table 6-1, final approval for transfer from Law 203 to Law 159 status was approved for seven companies in 1999, with a delay of 8-17 months following the sale dates. Ninety percent of these companies were sold to the Employee Stakeholder Associations (ESAs) and now operate under Law 159. The last remaining public sector company to undergo an ESA privatization was the Gharbia Rice Milling Company in July 2001. No public sector rice milling companies remain.

**Table 6-1: Sale and Share Data for ESA Rice Milling Companies**

| ESA Rice Company | Selling Date | Sold% | | Current HC Share | Sale Value (Million LE) | | | Date of Final Approval to Law 159 Status |
|---|---|---|---|---|---|---|---|---|
| | | Private Sector | ESA | | Private Sector | ESA | Total | |
| Damietta & Belkas | 1/1/98 | 0.1% | 90% | 9.9% | 0.005 | 48.557 | 48.562 | 27/06/99 |
| Sharkeya Mills | 1/7/98 | 0.1% | 90% | 9.9% | 0.007 | 38.691 | 38.698 | 4/3/99 |
| Kafr El Sheikh Mills | 27/07/98 | 0.1% | 90% | 9.9% | 0.005 | 12.983 | 12.988 | 19/09/99 |
| Rasheed Mills | 26/09/98 | 0.1% | 90% | 9.9% | 0.005 | 11.498 | 11.503 | 30/10/99 |
| El Beheira Mills | 26/09/98 | 0.1% | 90% | 9.9% | 0.01 | 21.780 | 21.79 | 8/8/99 |
| Dakahleya Mills | 3/10/98 | 0.1% | 90% | 9.9% | 0.02 | 36.713 | 36.733 | 27/06/99 |
| Alexandria Mills | 10/10/98 | 0.1% | 90% | 9.9% | 0.01 | 26.775 | 26.785 | 10/7/99 |
| Gharbeya Mills | 01/07/01 | 0.0% | 90% | 10.0% | 0.0 | 51.190 | 51.190 | Not Yet |

Source: MPE, *Privatization Achievements*, Sept. 2001

In practice, however, the Holding Company continues to control the operations of the ESA mills. The employees' shares in the ESA milling companies are nominally 90% but practically less, as the employees supposedly buy stakes (or shares) of these companies on an installment plan over a ten to thirteen year period. None of the employee associations in the ESA mills have made any payments to the Holding Company to date. In addition, the Chairman of the FIHC chairs weekly meetings of the public mill chairmen in Cairo to coordinate paddy procurement, milling, and export activities. Last, the FIHC has intervened during the past two seasons to guarantee bank loans to ESA milling companies. Without FIHC, most of the ESA mills could not obtain bank loans. While privatization has been completed from a legal standpoint, the eight ESA milling companies operate more as public companies under HC control, and the HC has a majority of seats on each company's board of directors.

## 6.2 ESA Rice Milling Activity in 1999/00 and 2000/01

The ESA rice mills purchased an estimated 453,000 mt of paddy early in the 1999/00 season (September to early December 1999) at prices ranging from LE 610 to 700/mt, considered high by the private sector.[26] By the end of the GOE fiscal year (30 June 2000), the ESA mills had only milled and sold about half of this paddy (as shown in Table 6-2). The rest remained in storage and was not milled until the end of December 2000. The ESA mills drew down the paddy in storage steadily over the second half of 2000, milling to fill government -to-government contracts with Libya and Syria.

**Table 6-2: Paddy Purchases and Closing Stocks by ESA Rice Mills, 1999/2000 Marketing Season**

(quantities in mt)

| Milling Company | Mill Type | Paddy Bought in 1999/2000 | Paddy Milled, July 1999-June 00 | | Paddy Carryover End of June 2000 | |
|---|---|---|---|---|---|---|
| | | mt | mt | % | mt | % |
| Alexandria | ESA | 31,750 | 15,895 | 50.1% | 15,855 | 49.9% |
| Rashid | ESA | 28,881 | 28,018 | 97.0% | 863 | 3.0% |
| Beheira | ESA | 53,103 | 28,584 | 53.8% | 24,519 | 46.2% |
| Kafr El Sheikh | ESA | 58,450 | 32,897 | 56.3% | 25,553 | 43.7% |
| Gharbia | ESA | 65,201 | 20,086 | 30.8% | 45,115 | 69.2% |
| Dakahlia | ESA | 49,114 | 23,259 | 47.4% | 25,855 | 52.6% |
| Damietta & Belkas | ESA | 64,365 | 28,515 | 44.3% | 35,850 | 55.7% |
| Sharkia | ESA | 43,075 | 30,075 | 69.8% | 13,000 | 30.2% |
| Upper Egypt Flour Mills/Kafr Bahoot | Gov. | 8,850 | 490 | 5.5% | 8,360 | 94.5% |
| Total | | 402,789 | 207,819 | 51.6% | 194,970 | 48.4% |

Source: FIHC, Paddy Purchases & Storage Sector. Unpublished data obtained by APRP/MVE.
Note: There was no paddy carryover from 1998/99 except for 20 mt of paddy by Gharbia Rice Milling Co.

[26] MVE is in the process of verifying earlier estimates of input, processed throughput and output of the ESA mills in 1999/00 and 2000/01. The FIHC may have this information, possibly in a consolidated form, but it does not make it publicly available. MVE has to visit individual milling companies to obtain company by company statistics. Note that the paddy purchase figures in Table 6-2, an internally consistent set of estimates from one source, do not quite match information obtained company by company. In the *Rice Subsector Endline* study, MVE will present its final and best estimates of ESA rice mill operations.

At the same time, the ESA mills cautiously purchased more paddy, from the large summer 2000 crop, to meet their milling requirements in 2000/01. Paddy purchases during the 2000/01 marketing year appear to have been about half of the 1999/00 levels (an estimated 230,000 mt, which MVE is in the process of verifying). This more conservative buying strategy was a sensible adjustment to aggressive buying practices of the ESA mills in 1999/00, when premium prices were paid following the first (1999) of two very large paddy crops, leading to unusually high carryover stocks.

The ESA rice mills specialize in milling and use either the public sector Rice Marketing Company (RMC) or the FIHC to export most of their milled rice that gets exported. In 1999/00, the RMC shipped an estimated 80% of the total public sector exports of 26,399 mt. In 2000/01, it shipped more than any other exporter, 100,665 mt, of which approximately 60,000 mt was exported to Syria and Libya and 40,000 mt to other destinations, particularly in Africa. RMC is hoping to export more in 2001/02, perhaps as much as 300,000 mt. The RMC's recent level of exports far outstrips its shipments of only 15,080 mt in 1998/99 and 30,635 mt in 1997/98.

In contrast, four of eight ESA mills exported directly in 2000/01, shipping only 9,139 mt of rice, 8.2% of total public sector exports. Three mills exported directly in 1997/98 and 1998/99. Private exporters sometimes use ESA mills as a source of supply, but MVE has no statistics on how much of the rice milled by the ESA mills is sold to the private sector.

The main RMC export deals are with Libya and Syria, negotiated as government- to- government bilateral trade agreements. Some of this trade, particularly with Syria, appears to be barter trade, as Syria ships vegetable oil in exchange for milled rice. Syrian Government tenders, announced by the Ministry of Supply, are for large volumes, typically 12,000 mt per shipment. The RMC has also exported smaller quantities to Iraq and some Sub-Saharan African countries.

Export shipments to Libya, 121,059 mt over the past two market years, are as natural white rice, grade 2 or 3. Shipments to Syria can be either camolino, grade 2 or 3, or natural rice, grades 2 or 3. Most of the RMC exports to Libya and Syria are milled from short-grain varieties, typically Giza 177 and Sakha 101, but Giza 178 can be used to produce lower-grade rice. A couple ESA mills purchased large volumes of Giza 178, representing over half of their total procurement in 1999/2000, but for most of the ESA mills, Giza 178 purchases represented less than one-third of total paddy purchases. Much of the paddy milled for export to markets other than Libya and Syria and for domestic sale is Giza 178, as these other countries are less demanding consumers of rice and buy on price rather than quality.

### 6.3 Employment at ESA Mills

Employment at the ESA rice mills, shown in Table 6-3, is now reportedly about 25 percent lower than before the conversion from Law 203 status to Law 159. MVE data, collected from individual ESA rice mills, show that there were 4,928 employees of the eight companies midway through the 2000/01 marketing season. This is 45.5% of the labor force of 10,830 workers at these same companies, when they were public sector firms in the RFM-HC in April 1997 (see Table 9-9, p. 103, in the *Rice Subsector Baseline Study*, 1999). Hence, it appears as if about 72% (an estimated 4,259) of the decrease of 5,902 workers over the four-year period took place up to the point where privatization got

underway (most of the ESA sales were made from July through November 1998), with a further 28% decline in employment (an estimated 1,643 workers) coming from early 1999 to early 2001.

Nearly 1,000 workers across the eight ESA milling companies were "on leave" or "reassigned" to the Holding Company by early 2001. While these workers are not included among the remaining 4,928 employees of the ESA mills and are no longer paid by those companies, they are still receiving pay from the FIHC. It is not clear what FIHC intends to do with these redundant workers.

Table 6-3 shows disaggregated employment by worker category at 7 of the 8 ESA rice milling companies.[27] From the figures presented in the table, MVE calculates that over one-quarter (27.7%) of all the workers are administrative or clerical. More than one-fifth (22.5%) work in rice milling, while 12.3% work in paddy purchasing and 7.3% in white rice sales. Another 30.2% work in other enterprises, most notably animal feed mixing (12.5%) and macaroni production (7.5%). The average monthly salary of the 4,538 workers is LE 601, or $145 at the exchange rate prevailing in mid-December 2001.

While some workers retired at the normal retirement age or of their own volition, most left through early retirement programs. At an average cost of LE 25,000 per early retirement, this means that the ERP for 3,935 rice workers has cost about LE 100 million.[28] With the passage of time and inflation, the typical severance package is now reported to be LE 30,000 per worker. With the significant downsizing that has taken place during the past 4.5 years, further layoffs will most likely be limited to various administrative workers, where there still appears to be over-staffing.

Downsizing of the public-turned-ESA rice milling companies has been easier than reducing the size of the labor force in public spinning companies. This is due to significant private investment in commercial rice mills during the second half of the 1990s, which created job opportunities for former public mill managers, technicians and laborers. In contrast, private investment in spinning has been modest. Most spinning capacity in Egypt resides in public spinning companies, joint investment companies, and privatized companies, which have not hired many new workers. There has been far less new, start-up private investment in spinning than in rice milling during APRP.

Employment in the public sector Rice Milling Company was 540 workers early in the 2001/02 marketing season. This represents a significant decrease of 55% from the 1,200 workers of 1995/96. Nevertheless, employment of 540, with 100 working in administration in Cairo and 440 working in governorate offices, seems inflated for a rice marketing company. This level of

[27] MVE was unable to obtain a breakdown of the 300 workers of Alexandria Rice Milling Company who worked in administration and the rice-milling enterprise.

[28] This calculation assumes that 2/3 of the departing workers chose early retirement and were compensated, on average, LE 25,000 per worker.

## Table 6-3: Worker Numbers and Distribution by Category in ESA Rice Mills, Early 2001

| Company | Total Employment | | Workers who Left | Mo. Cost of Employment (LE million) | Employment Distribution by Company Activities | | | | | | | | | On Leave |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Administrative | | | Rice Milling | Paddy Purchase | White Rice Mkt. | Macaroni Prod. | Animal Feed Unit | Other | |
| | Apr-97 | Early 2001 | | | Acct. | Finan-cial | Secret. | | | | | | | |
| Sharkia Rice Mills | 1,409 | 669 | 740 | 321417 | 100 | 80 | 30 | 100 | 40 | 40 | 78 | 121 | 80 | 83 |
| Damietta & Belkas | 1,152 | 399 | 753 | 208,333 | 30 | 50 | 10 | 60 | 20 | 20 | 30 | 100 | 79 | 50 |
| Kafr El Sheikh | 1,243 | 539 | 704 | 258000 | 80 | 90 | 40 | 115 | 85 | 56 | | | 73 | 88 |
| Dakahlia | 1,102 | 449 | 653 | 215,118 | 55 | 70 | 35 | 80 | 35 | 45 | 73 | | 56 | 71 |
| Gharbia | 2,101 | 1,234 | 867 | 516,545 | 120 | 115 | 87 | 216 | 210 | 88 | 75 | 235 | 88 | 158 |
| Beheira | 1,391 | 676 | 715 | 408547 | 65 | 54 | 40 | 125 | 130 | 75 | | 109 | 78 | 105 |
| Rashid | 1,132 | 572 | 560 | 245,000 | 21 | 47 | 40 | 326 | 37 | 9 | 85 | | 7 | 12 |
| Alexandria | 1,300 | 390 | 910 | 208,333 | | | | 300 | | | | 90 | | 400 |
| Total | **10,830** | **4,928** | **5,902** | **2,381,293** | **471** | **506** | **282** | **1322** | **557** | **333** | **341** | **655** | **461** | **967** |

Source: APRP/MVE, Interviews with ESA rice mill officials.

Notes: 1) Employees on leave are on leave without pay or their salaries are paid by the Holding Company. These employees are not included in "Total Employment."

2) Alexandria Rice Milling Company did not provide disaggregated employment data. Although the 300 active employees are listed in the rice milling category, they should be distributed across the administrative, rice milling, paddy purchasing, and rice marketing categories.

3) Calculations of the percentages of employees in each employment category exclude Alexandria Rice Milling Company.

employment reflects in part the large storage capacity of the RMC, which has 49 warehouses with a capacity of 40,000 mt. Note that the RMC was much more heavily involved in milled rice distribution in the first half of the 1990s, which is reflected in its large storage capacity.

## 6.4 ESA Rice Mill Paddy Procurement and Operations in 2001/02

The ESA rice milling companies obtained substantial loans from public sector banks at the very beginning of the marketing year, which they used to buy significant quantities of paddy. The financial package, guaranteed by the FIHC, is reportedly LE 250 million, loaned at commercial interest rates of 13% per annum for up to one year, whereas the FIHC was able to obtain loans of LE 120 million in 1999/00. The paddy procurement target for 2001/02 is 500,000 mt, but likely less will be purchased due to the strong rise in paddy prices by late October 2001, reportedly in anticipation of a second year of rice export subsidies. As of this writing, the GOE is financially squeezed and subsidies look unlikely. Nevertheless, average paddy procurement prices for the first 4-5 months of the marketing season, when the vast majority of trader and miller purchases take place, will probably be closer to LE 600/mt, which will decrease total paddy purchases by ESA mills to the 400,000 to 420,000 mt range for 2001/02 (barring further increases in bank loans).

The ESA rice mills anticipate once again that most of their rice will be destined for export, particularly to Libya and Syria. Domestic sales are likely to be minimal, as aggregate consumption may decline somewhat (given higher retail prices following the smaller 2001 crop), and as ESA mills have higher per mt processing costs than private sector mills, ranging from small village "single-pass" mills to multi-step commercial mills capable of processing 50 -100 mt of paddy per day.

## 6.5 The Future of ESA Mills in Egypt

MVE intends to address this issue in greater depth in the *Rice Subsector Endline* report that will be completed during the spring of 2002, anticipating complete and cross-checked data on mill operations for 1999/00 and 2000/01 and a mid-market year assessment of milling and sales activities during 2001/02. MVE is attempting to obtain some information on the financial performance of the ESA mills, though such information is not readily available.

Based on information from interviews, the ESA mills appear to be doing better than they did in 1998/99 and 1999/00, when too much paddy was procured at high prices. Paddy purchases were more conservative and at far more favorable prices in 2000/01 and carryover stocks were far lower by the end of the 2000/01 fiscal year than a year earlier.

The GOE, HC's and ESA mills have emphasized in the past that they can produce higher-quality rice than the private sector that can meet more demanding export market specifications. Most of the equipment at ESA mills was manufactured by Buhler or Sataki, two worldwide leaders in rice processing technology and machinery. Some of this equipment is now dated, but it appears to be in good running order. Most of the output of the ESA mills, probably three-fourths, is now exported.

Despite large shipments of ESA-milled rice to Libya and Syria, mainly through the public sector Rice Marketing Company of the FIHC, during the past two years, the GOE has brokered these deals at prices that are favorable to the ESA mills, which face higher processing costs than private mills. The FIHC has had to step in and guarantee finance to the ESA companies or they would not be able to operate at anything near the capacity utilization they operated at during the past two years. These loans from public sector banks have been at commercial rates of interest during the past two years, a departure from cheaper credit policies of earlier years, however.

It appears as if Sharkeya and Rashid Rice Milling Companies can survive over the long term, in part because they have successful ancillary enterprises (macaroni production and animal feed units), but also because they appear to be better managed than the other ESA mills. Such an assessment is offered very tentatively, however, as MVE has limited access to economic and financial information about these mills.

Nevertheless, MVE gets hints of which ESA milling companies are better run in interviews. For example, a manager of the Rashid Milling Company articulated a strategy for making best use of the ESA mills. He suggested that smaller private mills (*farakhat*) do the cleaning and dehulling, as well as the grinding of husks, while the large urban ESA mills should do the final processing, sorting and bagging. Having dehulling take place in rural areas also cuts down on transport costs. It is also better and more cost-effective to do buying of paddy in villages. Hence, Rashid will buy rice processed by smaller mills and complete the polishing and sorting when it can; the relationships among the prices of paddy, semi-processed rice, and fully milled and bagged rice delivered to exporters must, of course, be such that the ESA mills can acquire the semi-processed rice at a reasonable cost, allowing them to finish the milling process and add value profitably.

This manager also talked about establishing model village mills to demonstrate proper cleaning of paddy before milling and proper handling of milled rice processed in the first step of the milling cycle. He spoke about better integration between stages of rice processing, with more continuous operation of mills. This would reduce milling and financing costs, as well as leading to a higher-quality, exportable product. The milled rice coming out of many of the small- to medium-scale private mills, which invariably operate with cheaper Chinese milling equipment, is generally not suitable for direct export. It is interesting to note that one of the largest-volume private exporters is operating largely in a way consistent with what the Rashid manager identified as an optimal strategy. This exporter has polishing, sorting and bagging equipment at his warehouse. He typically buys rice processed (first step) in small- to medium-scale private mills.

Despite glimpses of better management, the very prominent market presence of the ESA mills raises questions. For how many more marketing seasons will ESA mills require FIHC guarantees in order to obtain finance? How much longer will the FIHC hold weekly meetings with the heads of the ESA mills to determine paddy buying levels and strategies and hence operating levels? Without the government-to-government export deals, could the ESA mills survive, or do they require a protected market niche where the deals with foreign county importers are not highly price sensitive? The *Rice Subsector Endline* report will attempt to answer some of these questions, with the caveat that our ability to do an in-depth assessment of the ESA mills depends entirely on the willingness of FIHC officials to meet with us and address the issues candidly. Without this cooperation, MVE can obtain information in a partial and laborious way, but it lacks the rigor, internal consistency, and the comprehensiveness of a serious economic analysis.

## 7. MVE RECOMMENDATIONS ON POLICY AND REGULATORY ISSUES

The rice industry has enjoyed greater success in influencing policy during the past year or so, using the Rice Subcommittee of the ACC to advocate particular policies and the Rice Branch of the Cereals Industry Chamber. Both were instrumental in convincing the GOE to subsidize rice exports during the 2000/01 marketing season, which led to record shipments. It is not clear whether the GOE will subsidize rice exports again in 2001/02, but this appears to be unlikely given budgetary constraints.

In early November 2001, the Rice Subcommittee of the ACC has asked the GOE for permission in 2001/02 to import up to 75,000 mt of medium- and long-grain paddy from the U.S. for processing and export of the milled rice. The strong rise in paddy procurement prices from LE 450-500/mt at the beginning of the marketing year to over LE 600/mt by late October prompted this request. Rice millers and exporters charge domestic traders with hoarding paddy in anticipation of a strong price rise due to the expected rice export subsidies.

Clearly, rice millers and exporters have better access to policy-makers than they had five or even two years ago. There are, nevertheless, items on the policy and regulatory agenda that have not been fully addressed:

*Allow Imports and Exports of Paddy and Cargo.* Exports of cargo have been permitted for 4-5 years, while HE Minister Youssef Wally announced during the 2000/01 export marketing season that exports of paddy were allowable.

The import rules are less clear. Large-volume rice traders asked the GOE for permission to import paddy in early 2001/02, presumably because it has never been done before and might not be permitted. In Egypt, the private sector's operative assumption appears to be that unless a high-level policy-maker explicitly states that it is permissible to do something in business or trade, it is best to assume that it is not legal. This is a very different mindset than that of North American businessmen. As a result of the private sector's hesitancy to do anything without explicit GOE blessing, it would be useful if a GOE official, such as HE Youssef Wally announced that rice millers and traders are free to import and export all types and grades of rice, at different stages of processing, provided that phyto-sanitary regulations are met.

*Lower the Rice Tariff.* Protection of nearly 30 percent makes rice imports prohibitively expensive in most years. Although the MALR, the Ministry of Industry and producers want protection, traders could import rice during years of short paddy crops to help meet domestic requirements, while maintaining export shares in key markets. Consumers, particularly lower-income households, would benefit.

After attempts during two APRP Tranches to lower the tariff were thwarted, this issue is off the reform agenda for now. The smaller 2001 paddy crop may not cover 2001/02 domestic consumption requirements at prices that many consumers can afford. This could force the tariff issue back on the table.

*GOE Intervention in Paddy Price Policy Should be Avoided.* Historically, GOE interventions tend to be de-stabilizing rather than stabilizing, although millers and exporters were delighted with rice export subsidies announced in January 2001. The declaration of a mid-season minimum paddy price for producers by HE Minister Youssef Wally January 2001 had a short yet insignificant impact on paddy prices. It came too late in the paddy buying season, after many farmers had sold their paddy to traders and millers, to benefit most farmers. During the past several years, Minister Wally has announced producer paddy prices. This has generally influenced producer and trade expectations of paddy prices, though underlying market fundamentals, once widely grasped, tend to be the driving forces.

The announcement of a minimum paddy price of LE 600/mt in 1999/00 was instrumental in setting opening prices at unusually high levels in the fall of 1999. Since the ESA mills received significant finance early to begin buying paddy, they began the season buying at prices that later proved to be unjustifiably high. This limited export shipments and led ESA mills to carry over large volumes of paddy, purchased in fall 1999, into the next marketing season. In contrast, the second huge paddy crop of 2000 overwhelmed any public attempts by Minister Wally to talk up the producer price to what the MALR deemed a fair level of LE 500/mt or more. Large carryover stocks, plus a second bumper crop, forced producer prices to very low levels, LE 300-400/mt, during the main buying months of the 2000/01 marketing season. The announced minimum paddy price of LE 500/mt in August 2001 has been upheld and exceeded by a wide margin in October and November 2001, as the 2001 paddy crop is smaller and there are allegations of hoarding by traders anticipating rice export subsidies. In conclusion, it appears as if GOE paddy price announcements have actually set minimum buying levels in one of the past three years, 1999/2000. Most industry participants, other than farmers, prefer to see the GOE not intervene in paddy pricing.

*Generate Reliable Forecasts and Estimates of Rice Area Planted and Production.* As in earlier MVE rice reports, we stress the importance of improving the reliability and timeliness of estimates of rice area, yield and output, by variety and by governorate. The divergence between the MALR announced rice area and MWRI unofficial estimates suggest that the published MALR statistics are unreliable. Private traders, millers, exporters and prospective importers need reliable information on supplies (at a minimum, production, but also including stocks) to run their businesses effectively.

It is important to note that there is a substantial lag between the time when area and yield estimates become available to MALR insiders (typically by late August) and the time when such data are published, typically after the main months of the paddy buying season are over. In an open, liberalized agricultural economy, this is simply unacceptable. When asked why MALR estimates are not released publicly as soon as they are generated, informants state that the Minister and other key MALR officials prefer to wait to see how the harvest goes, how plentiful paddy and rice supplies seem to be, and what paddy and rice prices are during the first four months of the marketing season. No one wishes to release estimates that could potentially embarrass anyone. This leads to delayed issuing of official figures until December or January in many years. Since improved, timely production and market information is an essential prerequisite of a liberalized rice market, these delays should be eliminated.

*Consult the Industry More Closely Before Making Major Varietal Changes.* Although large commercial millers and exporters have accepted the phasing out of Gizas 171 and 172, due to susceptibility to rice blast, they still wish to be consulted on rice varieties and to influence breeding decisions. Beginning in March 1999, the rice industry and a senior MALR breeder and official entered into a dialogue about the characteristics of different rice varieties. At first cantankerous, these initial discussions seem to have been followed by periodic MALR presentations in front of industry audiences. Exporters and millers are pleased with Giza 177 and Sakha 101, which have replaced Gizas 171 and 172 as the top-quality short-grain export varieties.

In contrast, industry opinions of Giza 178 and Sakha 102 are generally negative. Millers and exporters state that Giza 178 is dark, has a high proportion of chalky and discolored grains, and has thin grains susceptible to breakage when milled. Sakha 102 has faced problems in 2000/01 and early 2001/02. It also has low milling yields, though it is not entirely clear whether this is an intrinsic problem or one linked to inadequate drying and milling of paddy with too high a moisture content. Whatever the problem, exporters don't consider Sakha 102 as exportable. Giza 178 was exportable in 2000/01, because its exports to less discriminating, lower-income markets (mainly in Sub-Saharan Africa) were twice as heavily subsidized as other varieties.

While an intermittent dialogue between leading millers and exporters and the MALR has been established, it could be strengthened. Rice industry leaders could provide more formal input into the ARC Rice Research Institute's breeding and varietal selection program. Data could be collected on milling yields of different varieties of paddy, under both experiment station (Rice Technology and Training Institute) and field conditions (at typical, representative mills of different types and scale of operation). Rice researchers could also initiate cooking and consumer taste tests to determine which varieties have the most suitable consumption characteristics.

*Strengthen Rice Situation and Outlook Reporting, Including Reporting of Accurate Price Information.* The void of useful public information for the industry is being filled in part by an APRP/RDI effort to develop a web site for rice. APRP is working closely with the MFT's Egyptian Export Promotion Center to collect and post (on the web site) weekly data on ex-mill white rice prices and FOB mill export prices. As APRP moves toward closure, it is not clear, however, how this effort will be sustained. EEPC staff are being paid salary supplements by APRP to collect the weekly rice price data. It is not certain that EEPC has or will budget funds to continue this effort. Updating of the web site is somewhat erratic as well. What is a valuable initiative to generate new information that no public agency has ever collected in Egypt may be the victim of coming too little, too late in the APRP program to be sustained. This would be unfortunate, but ultimately it is the responsibility of the MFT to evaluate such initiatives (EEPC data collection and posting to web site) carefully and earmark funds for the continuation of the stronger ones. As the second most important agricultural commodity export, any well-conceived initiative to improve rice price data would appear to be worthy of sustained GOE funding.

An important concomitant of accurate price reporting is information about traded volumes. In most years, paddy producers sell much of their paddy during the 3-4 months after the harvest, because they need cash. In a few unusual years, such as 1996/97 and 2001/02, some farmers and many small,

medium and large traders are alleged to be holding paddy stocks for several months in anticipation of higher prices. We use the word "alleged," because there simply are no data available on paddy storage practices.[29] Clearly, good S&O reporting would include empirically derived estimates of paddy stocks held by producers, traders and millers.[30] Having a good idea of paddy stocks, along with crop size estimates, helps private sector participants to make better business decisions. It also allows the government to monitor developments in the rice market more closely and accurately.

*Allow the Egyptian Pound to Float.* The steady depreciation of the Egyptian pound in the fall of 2000 and its devaluations in early August and mid-December 2001 were positive signs that the GOE wishes to align the pound more accurately and in a more timely manner with its real value against the U.S. dollar and other currencies. The once explicit and now implicit dollar peg will probably be phased out in favor of tying the value of the pound to a basket of currencies of major trading partners, including the U.S., the EU (the euro), Japan (the yen), and perhaps several Gulf trading partners.

Floating of the pound will make Egyptian rice more competitive in world markets, where international rice prices remain depressed at historically low levels (see USDA/ERS *Rice Outlook*, December 2001). If the GOE decides not to subsidize rice exports, as it did in 2000/01, smooth and timely adjustments in the value of the pound will be essential to maintaining competitiveness in world markets.

By allowing the pound to depreciate, the LE cost of importing rice will rise. This will make it easier to remove or reduce the 20% tariff (plus 5% more in sales tax and 3% in various fees). An overvalued pound not only penalizes rice exporters, but it makes imports artificially cheap in local currency terms. During the 1990s, the nearly 30% protection of the tariff, sales tax and fees could be viewed as necessary to offset the degree of overvaluation of the currency. As the pound has been allowed to float, this argument to maintain a protective tariff can no longer be made.

---

[29] Note that APRP/MVE conducted a final producer survey of 750 farm households in November 2001, which obtained a snapshot of on farm paddy stocks. These data are being entered and cleaned.

[30] Producers and traders hold virtually all their stocks as paddy. Milled rice is subject to deterioration and loss. Millers also hold paddy stocks, depending upon their financial resources. They are loathe to hold milled rice stocks, because they need to turn over their capital, once the rice has been milled, to procure more paddy.

## REFERENCES


Abdel-Azim Tantawi Badawi, Chairman of National Rice Campaign. No date. A Study about the Compromise between the Cultivated Paddy Varieties and the World and Domestic Market Requirements.

CAPMAS. Various issues. *Monthly Bulletin, Consumer Price Index.* Cairo, Egypt.

CAPMAS. Various isuues. *Monthly Bulletin, Wholesale Prices Index.* Cairo, Egypt.

CAPMAS. **Annual Bulletin of Foreign Trade.** Cairo, Egypt.

Childs, Nathan W. *Rice: Background and Issues for Farm Legislation*. USDA/ERS. July, 2001.

Ender, Gary, John Holtzman, Adel Mostafa, Ezz Eldin Abdel Kader, Nabil El Santricy, Sherif Fayyad. **Effects of Policy Reform Under APRP: Progress Indicators, 1990-1999.** MVE Unit - APRP, Monitoring Report No.3. Abt Associates Inc. Cairo, Egypt. April, 2001.

Holtzman, John, in collaboration with Abdel-Rahim Ismail and Sherif Fayyad. **Rice Subsector Baseline Update**. MVE Unit - APRP, Impact Assessment Report No. 10. Abt Associates Inc. Cairo, Egypt. January, 2000.

Holtzman, John, in collaboration with Charles Stathacos and Abdel-Rahim Ismail. **Rice Subsector Baseline Study.** MVE Unit - APRP, Impact Assessment Report No. 3. Abt Associates Inc. Cairo, Egypt. March, 1999.

Krenz, Ronald D. with Abdel Sattar Ahmed Shenashan and Lawrence Kent. January, 1999. **The Effects of Liberalization and Privatization on Employment: The Case of Rice.** APRP/RDI Unit. Report No. 53. Cairo, Egypt.

Krenz, Ronald D., Lawrence Kent and Abdel Sattar Ahmed Shenashan. January 1999. *Liberalization Can Lead to Net Increases in Employment: The Case of Rice.* APRP/RDI Policy Brief, Issue #11.

London Rice Brokers' Association. Various Monthly *Circulars*, 2000-2001. Farnham, Surrey, England.

Ministry of Public Enterprise. September 2001. *Privatization Achievements.* Cairo, Egypt.

Morsy Ali Fawzy, Byram, T. J., Ramzi Mubarak, and Abdel Salam Gomaa. **Short-Term Wheat Yield Forecasting in Egypt: An Assessment.** MVE Unit - APRP, Impact Assessment Report No. 16. Abt Associates Inc. Cairo, Egypt. April, 2001.

Morsy A. Fawzy, Larry Pope, Rabie Amer, Ramzi Mubarak, and Mohamed E. Abdel Salam. **Short-Term Cotton Forecasting in Egypt.** MVE Unit - APRP, Impact Assessment Report No. 13. Abt Associates Inc. Cairo, Egypt. July, 2000.

Morsy A. Fawzy, Larry Pope, Yehia M. El-Din and Ghazal Amer. **Availability and Quality of Agricultural Data in Egypt.** MVE Unit - APRP Impact Assessment Report No. 4. Cairo, Egypt. December, 1998.

MPWWR, Water Policy Reform Program, International Resources Group, Winrock International and Nile Consultants. December 1999. **Rice Water Policy Phase I: Water Monitoring and Evaluation Program.** APRP-Water Policy Reform Activity. Report No. 26. Cairo, Egypt.

MPWWR, Water Policy Reform Program, International Resources Group, Winrock International and Nile Consultants. June 1998. **Assessment of Egypt's Rice Policy and Strategies for Water Management.** APRP-Water Policy Reform Activity. Report No. 6. Cairo, Egypt.

MPWWR, Water Distribution Department, Water Management Research Institute, Irrigation Sector. 1996. **Water Resources Strategic Research Activity. Strategy of Rice Cultivation in Egypt.** WRSR Publication Series No. 8. Cairo, Egypt.

Ouédraogo, Ismael and Abdel-Rahim Ismail. October 1997. **Progress and Obstacles in Rice Subsector Liberalization in Egypt: A Rapid Appraisal to Verify Policy Benchmarks.** Monitoring, Verification and Evaluation Unit, APRP. Verification Report No. 4. Cairo, Egypt.

Ragaa El-Amir, Hamdi Salem and Eric Wailes. March 1996. **Analysis of Egypt's Rice Marketing System: Final Draft Report.** Contract No. 263-0255-C-00-5045-00. USAID/Cairo, DATEX Inc. Arlington, VA.

United States Department of Agriculture, Economic Research Service. *Rice Outlook* monthly bulletins posted on the USDA/ERS web site (http://www.econ.ag.gov).

United States Department of Agriculture, Economic Research Service. November, 2000. **Rice Situation and Outlook Yearbook.** Prepared by Nathan Childs et al.

United States Department of Agriculture, Foreign Agricultural Service, GAIN Report. "Egypt Grain and Feed Rice Voluntary Report, 2001." 13 December 2001.

Wailes, Eric. December 1998. *Consultancy Trip Report.* APRP/RDI Unit. Cairo, Egypt.

Wailes, Eric et al. March 1995. **Impacts of Agricultural Policy Reforms on Rice Production, Milling, Marketing, and Trade in Egypt**. Department of Agricultural Economics and Rural Sociology, University of Arkansas, Fayetteville.

www.agpolicy.com Created in 2001. Web site that reports selected rice statistics.

## ANNEXES